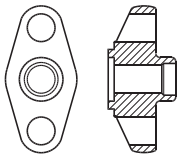
ENGINEERING
TOMORROW

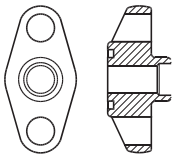
Data sheet

Spare parts and accessories

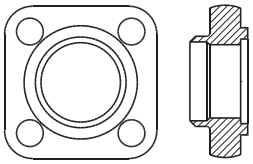
Flanges, gaskets, bolts and nuts for Industrial Refrigeration products



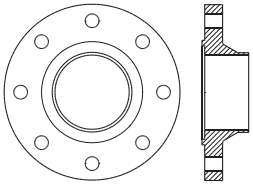
Tongue (oval):



Groove (oval):



Tongue (Square):



Tongue (Round):

Valve type	See details on page #
Flanges, Gaskets, Bolts and nuts	
TEA/TEAT Expansion valves	2-3
EVRA/EVRAT Solenoid valves	4-5
ICF EVRAT - FA + solenoid valves	6-7
PML Solenoid valves	8
PMLX 2-step solenoid valves	9
PM Pilot operated servo valves	10-11
ICV PM Valve housings	12
PMC Pilot operated servo valves	13
CVMD Pressure regulating valves	14
FA Strainers	15-16
NRVA Check valves	17-18
NRVS Check valves	19
PMFL Liquid level regulating valves	20
PMFH Liquid level regulating valves	21
Dimensions	
Flange version 1	22-23
Flange version 2	24
Flange version 3	25
Flange version 4	26
Flange version 5	27
Flange version 6	28
Flange version 8	29
Flange version 10	30
Flange version 11	31
Flange version 12	32
Flange version 13	33
Flange version 14	34-35
Flange for NRVS	36

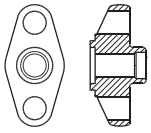
ЮГОВ -Проект
інженерно-виробниче підприємство

Офіційний дистриб'ютор
Danfoss в Україні

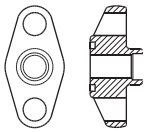
ugov.ua

Flanges for TEA / TEAT Expansion valves

Tongue (oval):



Groove (oval):



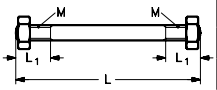
For product	Connection size [in.]	Connection size [mm]	Material	Flange type	Design	Connection standard	Connection type	Shape	Code no.
Flange version 1									
TEA 20 / TEAT 20	¼	6	Steel	Single	Tongue	EN 10220	Butt welding	Oval	**006-1118**
TEA 20 / TEAT 20	¼	6	Steel	Single	Groove	EN 10220	Butt welding	Oval	**006-1119**
TEA 20 / TEAT 20	⅜	10	Steel	Single	Tongue	EN 10220	Butt welding	Oval	**006-1120**
TEA 20 / TEAT 20	⅜	10	Steel	Single	Groove	EN 10220	Butt welding	Oval	**006-1121**
TEA 20 / TEAT 20	½	15	Steel	Single	Tongue	EN 10220	Butt welding	Oval	**006-1122**
TEA 20 / TEAT 20	½	15	Steel	Single	Groove	EN 10220	Butt welding	Oval	**006-1123**
TEA 20 / TEAT 20	¾	20	Steel	Single	Tongue	EN 10220	Butt welding	Oval	**006-1124**
TEA 20 / TEAT 20	¾	20	Steel	Single	Groove	EN 10220	Butt welding	Oval	**006-1125**
TEA 20 / TEAT 20	½	-	Brass	Single	Tongue	ASME B 16.22	Soldering	Oval	**006-1160**
TEA 20 / TEAT 20	½	-	Brass	Single	Groove	ASME B 16.22	Soldering	Oval	**006-1161**
TEA 20 / TEAT 20	⅝	-	Brass	Single	Tongue	ASME B 16.22	Soldering	Oval	**006-1162**
TEA 20 / TEAT 20	⅝	-	Brass	Single	Groove	ASME B 16.22	Soldering	Oval	**006-1163**
TEA 20 / TEAT 20	⅞	-	Brass	Single	Tongue	ASME B 16.22	Soldering	Oval	**006-1176**
TEA 20 / TEAT 20	⅞	-	Brass	Single	Groove	ASME B 16.22	Soldering	Oval	**006-1177**
TEA 20 / TEAT 20	1	-	Brass	Single	Tongue	ASME B 16.22	Soldering	Oval	**006-1166**
Flange version 1.2									
TEA 20 / TEAT 20	-	15 x 15	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027B0181**
TEA 20 / TEAT 20	⅝ x ⅞	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**006-1195**
Flange version 1.3									
TEA 20 / TEAT 20	½	15	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3253**
TEA 20 / TEAT 20	⅜	10	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1112**
TEA 20 / TEAT 20	½	15	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1115**
TEA 20 / TEAT 20	¾	20	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1120**
TEA 20 / TEAT 20	⅜	10	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N2020**
TEA 20 / TEAT 20	½	15	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N2021**
TEA 20 / TEAT 20	¾	20	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N2022**
TEA 20 / TEAT 20	⅜	10	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2010**
TEA 20 / TEAT 20	½	15	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2011**
TEA 20 / TEAT 20	⅜	10	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1005**
TEA 20 / TEAT 20	½	15	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1006**
TEA 20 / TEAT 20	-	16	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1116**
TEA 20 / TEAT 20	-	22	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1122**
TEA 20 / TEAT 20	⅝	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1117**
TEA 20 / TEAT 20	⅞	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1123**
Flange version 3									
TEA 85 / TEAT 85	1	25	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3014**
TEA 85 / TEAT 85	¾	20	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3045**
TEA 85 / TEAT 85	¾	20	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1220**
TEA 85 / TEAT 85	1	25	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1225**
TEA 85 / TEAT 85	1¼	32	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1230**
TEA 85 / TEAT 85	¾	20	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3031**
TEA 85 / TEAT 85	1	25	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3032**
TEA 85 / TEAT 85	1¼	32	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3033**
TEA 85 / TEAT 85	¾	20	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2001**
TEA 85 / TEAT 85	1	25	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2002**
TEA 85 / TEAT 85	¾	20	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1001**
TEA 85 / TEAT 85	1	25	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1002**
TEA 85 / TEAT 85	-	22	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1222**
TEA 85 / TEAT 85	-	28	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1228**
TEA 85 / TEAT 85	⅞	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1223**
TEA 85 / TEAT 85	1⅛	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1229**

Flange version 1: Each code no. includes one flange and one flange gasket.
Flange version 1.2: Each code no. includes two flanges, two flange gaskets, two staybolts (M12 × 135 mm / M12 × 127 mm) and four nuts (M12).
Flange version 1.3: Each code no. includes two flanges.
Flange version 3: Each code no. includes two flanges.

Flange gaskets

For flange version	Gasket dimensions ID x OD x h [mm]	Gasket dimensions ID x OD x h [in.]	Multipack qty	Code no.
1 + 1.2 + 1.3	22 × 32 × 1.0	0.866 × 1.260 × 0.039	40	**020-2133**

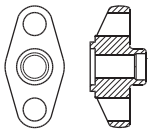
Set of staybolts and gaskets for flanges



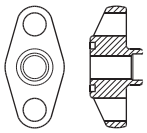
Set of staybolts and gaskets for	Material	Thread [M]	L_1 [mm]	L_1 [in.]	L [mm]	L [in.]	Staybolts qty	Nuts qty	Gaskets qty	Code no.
TEA 20 / TEAT 20 without filter	Steel	M12	19	0.748	115	4.527	2	4	3	**006-1107**
TEA 20 / TEAT 20 with filter	Steel	M12	19	0.748	170	6.693	2	4	3	**006-1103**
TEA 85 / TEAT 85 with filter	Steel	M12	25	0.984	206	8.110	2	4	3	**006-1106**

Flanges for EVRA / EVRAT Solenoid valves

Tongue (oval):



Groove (oval):



For product	Connection size [in.]	Connection size [mm]	Material	Flange type	Design	Connection standard	Connection type	Shape	Code no.
Flange version 1									
EVRA 3 / EVRA 10 / EVRA 15	¼	6	Steel	Single	Tongue	EN 10220	Butt welding	Oval	**006-1118**
EVRA 3 / EVRA 10 / EVRA 15	¼	6	Steel	Single	Groove	EN 10220	Butt welding	Oval	**006-1119**
EVRA 3 / EVRA 10 / EVRA 15	⅜	10	Steel	Single	Tongue	EN 10220	Butt welding	Oval	**006-1120**
EVRA 3 / EVRA 10 / EVRA 15	⅜	10	Steel	Single	Groove	EN 10220	Butt welding	Oval	**006-1121**
EVRA 3 / EVRA 10 / EVRA 15	½	15	Steel	Single	Tongue	EN 10220	Butt welding	Oval	**006-1122**
EVRA 3 / EVRA 10 / EVRA 15	½	15	Steel	Single	Groove	EN 10220	Butt welding	Oval	**006-1123**
EVRA 3 / EVRA 10 / EVRA 15	¾	20	Steel	Single	Tongue	EN 10220	Butt welding	Oval	**006-1124**
EVRA 3 / EVRA 10 / EVRA 15	¾	20	Steel	Single	Groove	EN 10220	Butt welding	Oval	**006-1125**
EVRA 3 / EVRA 10 / EVRA 15	½	-	Brass	Single	Tongue	ASME B 16.22	Soldering	Oval	**006-1160**
EVRA 3 / EVRA 10 / EVRA 15	½	-	Brass	Single	Groove	ASME B 16.22	Soldering	Oval	**006-1161**
EVRA 3 / EVRA 10 / EVRA 15	⅝	-	Brass	Single	Tongue	ASME B 16.22	Soldering	Oval	**006-1162**
EVRA 3 / EVRA 10 / EVRA 15	⅝	-	Brass	Single	Groove	ASME B 16.22	Soldering	Oval	**006-1163**
EVRA 3 / EVRA 10 / EVRA 15	⅞	-	Brass	Single	Tongue	ASME B 16.22	Soldering	Oval	**006-1176**
EVRA 3 / EVRA 10 / EVRA 15	⅞	-	Brass	Single	Groove	ASME B 16.22	Soldering	Oval	**006-1177**
EVRA 3 / EVRA 10 / EVRA 15	1	-	Brass	Single	Tongue	ASME B 16.22	Soldering	Oval	**006-1166**
Flange version 1.2									
EVRA 3 / EVRA 10 / EVRA 15	-	15 x 15	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027B0181**
EVRA 3 / EVRA 10 / EVRA 15	⅝ x ⅞	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**006-1195**
Flange version 1.3									
EVRA 3 / EVRA 10 / EVRA 15	½	15	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3253**
EVRAT 20	½	15	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3253**
EVRA 3 / EVRA 10 / EVRA 15	⅜	10	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1112**
EVRA 3 / EVRA 10 / EVRA 15	½	15	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1115**
EVRA 3 / EVRA 10 / EVRA 15	¾	20	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1120**
EVRA 3 / EVRA 10 / EVRA 15	⅜	10	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N2020**
EVRA 3 / EVRA 10 / EVRA 15	½	15	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N2021**
EVRA 3 / EVRA 10 / EVRA 15	¾	20	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N2022**
EVRA 3 / EVRA 10 / EVRA 15	⅜	10	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2010**
EVRA 3 / EVRA 10 / EVRA 15	½	15	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2011**
EVRA 3 / EVRA 10 / EVRA 15	⅜	10	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1005**
EVRA 3 / EVRA 10 / EVRA 15	½	15	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1006**
EVRA 3 / EVRA 10 / EVRA 15	-	16	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1116**
EVRA 3 / EVRA 10 / EVRA 15	-	22	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1122**
EVRA 3 / EVRA 10 / EVRA 15	⅝	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1117**
EVRA 3 / EVRA 10 / EVRA 15	⅞	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1123**
Flange version 3									
EVRA 20 / EVRA 25	1	25	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3014**
EVRA 20 / EVRA 25	¾	20	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3045**
EVRA 20 / EVRA 25	¾	20	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1220**
EVRA 20 / EVRA 25	1	25	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1225**
EVRA 20 / EVRA 25	1¼	32	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1230**
EVRA 20 / EVRA 25	¾	20	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3031**
EVRA 20 / EVRA 25	1	25	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3032**
EVRA 20 / EVRA 25	1¼	32	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3033**
EVRA 20 / EVRA 25	¾	20	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2001**
EVRA 20 / EVRA 25	1	25	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2002**
EVRA 20 / EVRA 25	¾	20	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1001**
EVRA 20 / EVRA 25	-	22	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1222**
EVRA 20 / EVRA 25	-	28	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1228**
EVRA 20 / EVRA 25	⅞	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1223**
EVRA 20 / EVRA 25	1⅛	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1229**

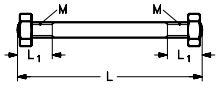
Flange version 1: Each code no. includes one flange and one flange gasket.
Flange version 1.2: Each code no. includes two flanges, two flange gaskets, two staybolts (M12 × 135 mm / M12 × 127 mm) and four nuts (M12).
Flange version 1.3: Each code no. includes two flanges.
Flange version 3: Each code no. includes two flanges.

Flange gaskets

For flange version	Gasket dimensions ID x OD x h [mm]	Gasket dimensions ID x OD x h [in.]	Multipack qty	Code no.
1.1 + 1.2 + 1.3	22 × 32 × 1.0	0.866 × 1.260 × 0.039	40	**020-2133**

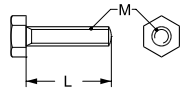
Flanges for EVRA / EVRAT Solenoid valves (continued)

Set of staybolts and gaskets for flanges



Set of staybolts and gaskets for	Material	Thread [M]	L_1 [mm]	L_1 [in.]	L [mm]	L [in.]	Staybolts qty	Nuts qty	Gaskets qty	Code no.
EVRA 10 (GGG 40.3)	Steel	M12	19	0.748	107	4.212	2	4	3	**006-1101**
EVRA 10 / EVRA 15 (GG 25) with filter	Steel	M12	19	0.748	188	7.401	2	4	3	**006-1104**
EVRA 20 / EVRA 25 (GG 25) with filter	Steel	M12	22	0.866	240	9.449	2	4	3	**006-1105**
EVRA 20 (GGG 40.3)	Steel	M12	19	0.748	127	5.000	2	4	3	**006-1108**

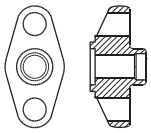
Bolts for flange connections



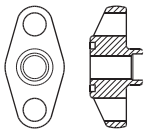
Type	Material	Material property class	M [mm]	L [mm]	L [in.]	Qty	Code no.
EVRA 20 / EVRA 25 / EVRAT 20	Stainless steel	Class A2/A4 to DIN 267	M12	45	1.772	4	**027F2220**
EVRA 10 / EVRA 15 / EVRAT 10 / EVRAT 15	Steel	Class 8 .8 to ISO 898	M12	35	1.378	4	**006-1139**
EVRA 20 / EVRA 25 / EVRAT 20	Steel	Class 8 .8 to ISO 898	M12	45	1.772	4	**006-1141**

Flanges for ICF EVRAT - FA + solenoid valves

Tongue (oval):



Groove (oval):



For product	Connection size [in.]	Connection size [mm]	Material	Flange type	Design	Connection standard	Connection type	Shape	Code no.
Flange version 1									
ICF 15 EVRAT	¼	6	Steel	Single	Tongue	EN 10220	Butt welding	Oval	**006-1118**
ICF 15 EVRAT	¼	6	Steel	Single	Groove	EN 10220	Butt welding	Oval	**006-1119**
ICF 15 EVRAT	⅜	10	Steel	Single	Tongue	EN 10220	Butt welding	Oval	**006-1120**
ICF 15 EVRAT	⅜	10	Steel	Single	Groove	EN 10220	Butt welding	Oval	**006-1121**
ICF 15 EVRAT	½	15	Steel	Single	Tongue	EN 10220	Butt welding	Oval	**006-1122**
ICF 15 EVRAT	½	15	Steel	Single	Groove	EN 10220	Butt welding	Oval	**006-1123**
ICF 15 EVRAT	¾	20	Steel	Single	Tongue	EN 10220	Butt welding	Oval	**006-1124**
ICF 15 EVRAT	¾	20	Steel	Single	Groove	EN 10220	Butt welding	Oval	**006-1125**
ICF 15 EVRAT	½	-	Brass	Single	Tongue	ASME B 16.22	Soldering	Oval	**006-1160**
ICF 15 EVRAT	½	-	Brass	Single	Groove	ASME B 16.22	Soldering	Oval	**006-1161**
ICF 15 EVRAT	⅝	-	Brass	Single	Tongue	ASME B 16.22	Soldering	Oval	**006-1162**
ICF 15 EVRAT	⅝	-	Brass	Single	Groove	ASME B 16.22	Soldering	Oval	**006-1163**
ICF 15 EVRAT	⅞	-	Brass	Single	Tongue	ASME B 16.22	Soldering	Oval	**006-1176**
ICF 15 EVRAT	⅞	-	Brass	Single	Groove	ASME B 16.22	Soldering	Oval	**006-1177**
ICF 15 EVRAT	1	-	Brass	Single	Tongue	ASME B 16.22	Soldering	Oval	**006-1166**
Flange version 1.2									
ICF 15 EVRAT	-	15 x 15	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027B0181**
ICF 15 EVRAT	⅝ x ⅞	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**006-1195**
Flange version 1.3									
ICF 15 EVRAT	½	15	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3253**
ICF 20 EVRAT	½	15	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3253**
ICF 15 EVRAT	⅜	10	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1112**
ICF 15 EVRAT	½	15	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1115**
ICF 15 EVRAT	¾	20	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1120**
ICF 15 EVRAT	⅜	10	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N2020**
ICF 15 EVRAT	½	15	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N2021**
ICF 15 EVRAT	¾	20	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N2022**
ICF 15 EVRAT	⅜	10	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2010**
ICF 15 EVRAT	½	15	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2011**
ICF 15 EVRAT	⅜	10	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1005**
ICF 15 EVRAT	½	15	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1006**
ICF 15 EVRAT	-	16	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1116**
ICF 15 EVRAT	-	22	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1122**
ICF 15 EVRAT	⅝	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1117**
ICF 15 EVRAT	⅞	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1123**
Flange version 3									
ICF 20 EVRAT	1	25	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3014**
ICF 20 EVRAT	¾	20	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3045**
ICF 20 EVRAT	¾	20	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1220**
ICF 20 EVRAT	1	25	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1225**
ICF 20 EVRAT	1¼	32	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1230**
ICF 20 EVRAT	¾	20	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3031**
ICF 20 EVRAT	1	25	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3032**
ICF 20 EVRAT	1¼	32	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3033**
ICF 20 EVRAT	¾	20	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2001**
ICF 20 EVRAT	1	25	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2002**
ICF 20 EVRAT	¾	20	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1001**
ICF 20 EVRAT	-	22	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1222**
ICF 20 EVRAT	-	28	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1228**
ICF 20 EVRAT	⅞	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1223**
ICF 20 EVRAT	1⅛	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1229**

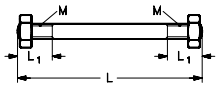
Flange version 1: Each code no. includes one flange and one flange gasket.
Flange version 1.2: Each code no. includes two flanges, two flange gaskets, two staybolts (M12 × 135 mm / M12 × 127 mm) and four nuts (M12).
Flange version 1.3: Each code no. includes two flanges.
Flange version 3: Each code no. includes two flanges.

Flange gaskets

For flange version	Gasket dimensions ID x OD x h [mm]	Gasket dimensions ID x OD x h [in.]	Multipack qty	Code no.
1.1 + 1.2 + 1.3	22 × 32 × 1.0	0.866 × 1.260 × 0.039	40	**020-2133**

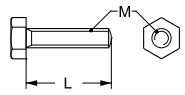
Flanges for ICF EVRAT - FA + solenoid valves (continued)

Set of staybolts and gaskets for flanges



Set of staybolts and gaskets for	Material	Thread [M]	L_1 [mm]	L_1 [in.]	L [mm]	L [in.]	Staybolts qty	Nuts qty	Gaskets qty	Code no.
ICF 15 EVRAT	Steel	M12	19	0.748	188	7.401	2	4	3	**006-1104**
ICF 20 EVRAT	Steel	M12	22	0.866	240	9.449	2	4	3	**006-1105**
ICF 20 EVRAT	Steel	M12	19	0.748	127	5.000	2	4	3	**006-1108**

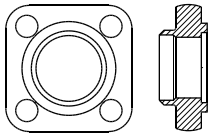
Bolts for flange connections



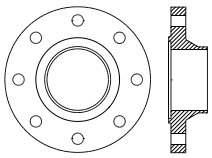
Type	Material	Material property class	M [mm]	L [mm]	L [in.]	Qty	Code no.
ICF 20 EVRAT	Stainless steel	Class A2/A4 to DIN 267	M12	45	1.772	4	**027F2220**
ICF 15 EVRAT	Steel	Class 8 .8 to ISO 898	M12	35	1.378	4	**006-1139**
ICF 20 EVRAT	Steel	Class 8 .8 to ISO 898	M12	45	1.772	4	**006-1141**

Flanges for PML Solenoid valves

Tongue (Square):



Tongue (Round):



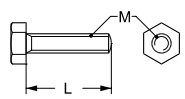
For product	Connection size [in.]	Connection size [mm]	Material	Flange type	Design	Connection standard	Connection type	Shape	Code no.
Flange version 10									
PML 32	1½	40	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**192H3016**
PML 32	1¼	32	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2332**
PML 32	1½	40	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2340**
PML 32	1⅜	-	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2335**
Flange version 11									
PML 40	2	50	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**192H3018**
PML 40	1½	40	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2440**
PML 40	2	50	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2450**
PML 40	1½	40	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Square	**027N2004**
PML 40	-	42	Steel	Set	Tongue/tongue	EN 1254	Soldering	Square	**027L2442**
PML 40	1⅝	-	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2441**
Flange version 12									
PML 50	2½	65	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**192H3020**
PML 50	2	50	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2550**
PML 50	2½	65	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2565**
PML 50	2	50	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Square	**027N2005**
PML 50	2⅛	54	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2554**
Flange version13									
PML 65	2½	65	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2665**
PML 65	3	80	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2680**
PML 65	-	76	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2666**
PML 65	2⅝	-	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2676**
Flange version14A									
PML 80	4	100	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Round	**027F2123**
PML 80	4	100	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Round	**027N3042**
Flange version14B									
PML 100	5	125	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Round	**027F2124**
PML 100	5	125	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Round	**027N3043**
Flange version14C									
PML 125	6	150	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Round	**027F2125**
PML 125	6	150	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Round	**027N3044**

Flange version 10, 11, 12, 13, 14A, 14B, 14C: Each code no. includes two flanges.

Flange gaskets

For flange version	Gasket dimensions ID x OD x h [mm]	Gasket dimensions ID x OD x h [in.]	Multipack qty	Code no.
10	42.5 × 57.5 × 1.5	1.673 × 2.264 × 0.059	40	**027F2176**
11	51 × 65 × 1.5	2.008 × 2.559 × 0.059	40	**027F2177**
12	60.5 × 75.5 × 1.5	2.382 × 2.972 × 0.059	40	**027F2178**

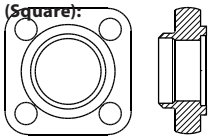
Bolts and nuts for flange connections



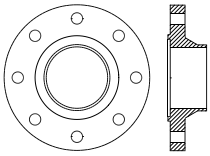
Type	Material	Material property class	Description	M [mm]	L [mm]	L [in.]	Qty	Code no. Bolts	Code no. Nuts
PML 32 / PML 40	Stainless steel	Class A2/A4 to DIN 267	Bolts	M12	45	1.772	8	**027F2221**	-
PML 50	Stainless steel	Class A2/A4 to DIN 267	Bolts + nuts	M14	65	2.559	8	**027F2222**	-
PML 80	Stainless steel	Class A2/A4 to DIN 267	Bolts + nuts	M20	70	2.756	16	**027F2224**	-
PML 32 / PML 40	Steel	Class 8 .8 to ISO 898	Bolts	M12	45	1.772	4	**006-1141**	-
PML 50	Steel	Class 8 .8 to ISO 898	Bolts	M14	65	2.559	4	**006-1142**	-
PML 65	Steel	Class 8 .8 to ISO 898	Bolts	M14	70	2.756	4	**006-1143**	**006-1146**
PML 80	Steel	Class 8 .8 to ISO 898	Bolts + nuts	M20	70	2.756	16	**027F2126**	-
PML 100	Steel	Class 8 .8 to ISO 898	Bolts + nuts	M20	75	2.953	16	**027F2127**	-

Flanges for PMLX 2-step solenoid valves

Tongue (Square):



Tongue (Round):



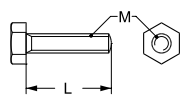
For product	Connection size [in.]	Connection size [mm]	Material	Flange type	Design	Connection standard	Connection type	Shape	Code no.
Flange version 10									
PMLX 32	1½	40	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**192H3016**
PMLX 32	1¼	32	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2332**
PMLX 32	1½	40	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2340**
PMLX 32	1⅜	-	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2335**
Flange version 11									
PMLX 40	2	50	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**192H3018**
PMLX 40	1½	40	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2440**
PMLX 40	2	50	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2450**
PMLX 40	1½	40	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Square	**027N2004**
PMLX 40	-	42	Steel	Set	Tongue/tongue	EN 1254	Soldering	Square	**027L2442**
PMLX 40	1⅝	-	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2441**
Flange version 12									
PMLX 50	2	50	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2550**
PMLX 50	2½	65	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2565**
PMLX 50	2	50	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Square	**027N2005**
PMLX 50	2⅛	54	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2554**
Flange version13									
PMLX 65	2½	65	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2665**
PMLX 65	3	80	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2680**
PMLX 65	-	76	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2666**
PMLX 65	2⅝	-	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2676**
Flange version14A									
PMLX 80	4	100	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Round	**027F2123**
PMLX 80	4	100	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Round	**027N3042**
Flange version14B									
PMLX 100	5	125	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Round	**027F2124**
PMLX 100	5	125	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Round	**027N3043**
Flange version14C									
PMLX 125	6	150	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Round	**027F2125**
PMLX 125	6	150	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Round	**027N3044**

Flange version 10, 11, 12, 13, 14A, 14B, 14C: Each code no. includes two flanges.

Flange gaskets

For flange version	Gasket dimensions ID x OD x h [mm]	Gasket dimensions ID x OD x h [in.]	Multipack qty	Code no.
10	42.5 × 57.5 × 1.5	1.673 × 2.264 × 0.059	40	**027F2176**
11	51 × 65 × 1.5	2.008 × 2.559 × 0.059	40	**027F2177**
12	60.5 × 75.5 × 1.5	2.382 × 2.972 × 0.059	40	**027F2178**

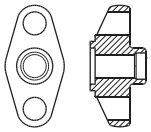
Bolts and nuts for flange connections



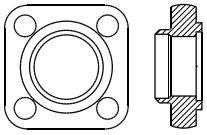
Type	Material	Material property class	Description	M [mm]	L [mm]	L [in.]	Qty	Code no. Bolts	Code no. Nuts
PMLX 32-40	Stainless steel	Class A2/A4 to DIN 267	Bolts	M12	45	1.772	8	**027F2221**	-
PMLX 50	Stainless steel	Class A2/A4 to DIN 267	Bolts + nuts	M14	65	2.559	8	**027F2222**	-
PMLX 80	Stainless steel	Class A2/A4 to DIN 267	Bolts + nuts	M20	70	2.756	16	**027F2224**	-
PMLX 32-40	Steel	Class 8 .8 to ISO 898	Bolts	M12	45	1.772	4	**006-1141**	-
PMLX 50	Steel	Class 8 .8 to ISO 898	Bolts	M14	65	2.559	4	**006-1142**	-
PMLX 65	Steel	Class 8 .8 to ISO 898	Bolts	M14	70	2.756	4	**006-1143**	**006-1146**
PMLX 80	Steel	Class 8 .8 to ISO 898	Bolts + nuts	M20	70	2.756	16	**027F2126**	-
PMLX 100	Steel	Class 8 .8 to ISO 898	Bolts + nuts	M20	75	2.953	16	**027F2127**	-

Flanges for PM Pilot operated servo valves

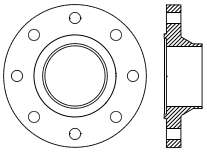
Tongue (oval):



Tongue (Square):



Tongue (Round):



	For product	Connection size [in.]	Connection size [mm]	Material	Flange type	Design	Connection standard	Connection type	Shape	Code no.
	Flange version 3									
	PM 5 / PM 10 / PM 15	1	25	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3014**
	PM 5 / PM 10 / PM 15	¾	20	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3045**
	PM 5 / PM 10 / PM 15	¾	20	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1220**
	PM 5 / PM 10 / PM 15	1	25	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1225**
	PM 5 / PM 10 / PM 15	1¼	32	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1230**
	PM 5 / PM 10 / PM 15	¾	20	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3031**
	PM 5 / PM 10 / PM 15	1	25	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3032**
	PM 5 / PM 10 / PM 15	1¼	32	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3033**
	PM 5 / PM 10 / PM 15	¾	20	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2001**
	PM 5 / PM 10 / PM 15	1	25	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2002**
	PM 5 / PM 10 / PM 15	¾	20	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1001**
	PM 5 / PM 10 / PM 15	1	25	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1002**
	PM 5 / PM 10 / PM 15	-	22	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1222**
	PM 5 / PM 10 / PM 15	-	28	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1228**
	PM 5 / PM 10 / PM 15	⅞	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1223**
	PM 5 / PM 10 / PM 15	1⅛	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1229**
	Flange version 10									
	PM 32	1½	40	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**192H3016**
	PM 32	1¼	32	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2332**
	PM 32	1½	40	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2340**
	PM 32	1⅜	-	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2335**
	Flange version 11									
	PM 40	2	50	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**192H3018**
	PM 40	1½	40	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2440**
	PM 40	2	50	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2450**
	PM 40	1½	40	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Square	**027N2004**
	PM 40	-	42	Steel	Set	Tongue/tongue	EN 1254	Soldering	Square	**027L2442**
	PM 40	1⅝	-	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2441**
	Flange version 12									
	PM 50	2	50	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2550**
	PM 50	2½	65	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2565**
	PM 50	2	50	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Square	**027N2005**
	PM 50	2⅛	54	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2554**
	Flange version13									
	PM 65	2½	65	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2665**
	PM 65	3	80	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2680**
	PM 65	-	76	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2666**
	PM 65	2⅝	-	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2676**
	Flange version14A									
	PM 80	4	100	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Round	**027F2123**
	PM 80	4	100	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Round	**027N3042**
	Flange version14B									
	PM 100	5	125	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Round	**027F2124**
	PM 100	5	125	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Round	**027N3043**
	Flange version14C									
	PM 125	6	150	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Round	**027F2125**
	PM 125	6	150	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Round	**027N3044**

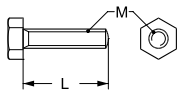
Flange version 3, 10, 11, 12, 13, 14A, 14B, 14C: Each code no. includes two flanges.

Flange gaskets

For flange version	Gasket dimensions ID x OD x h [mm]	Gasket dimensions ID x OD x h [in.]	Multipack qty	Code no.
10	42.5 × 57.5 × 1.5	1.673 × 2.264 × 0.059	40	**027F2176**
11	51 × 65 × 1.5	2.008 × 2.559 × 0.059	40	**027F2177**
12	60.5 × 75.5 × 1.5	2.382 × 2.972 × 0.059	40	**027F2178**

Flanges for PM Pilot operated servo valves (continued)

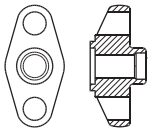
Bolts and nuts for flange connections



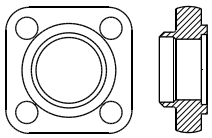
Type	Material	Material property class	Description	M [mm]	L [mm]	L [in.]	Qty	Code no. Bolts	Code no. Nuts
PM 5 / PM 10 / PM 15	Stainless steel	Class A2/A4 to DIN 267	Bolts	M12	45	1.772	4	**027F2220**	-
PM 32 / PM 40	Stainless steel	Class A2/A4 to DIN 267	Bolts	M12	45	1.772	8	**027F2221**	-
PM 50	Stainless steel	Class A2/A4 to DIN 267	Bolts + nuts	M14	65	2.559	8	**027F2222**	-
PM 80	Stainless steel	Class A2/A4 to DIN 267	Bolts + nuts	M20	70	2.756	16	**027F2224**	-
PM 5 / PM 10 / PM 15 / PM 32 / PM 40	Steel	Class 8 .8 to ISO 898	Bolts	M12	45	1.772	4	**006-1141**	-
PM 50	Steel	Class 8 .8 to ISO 898	Bolts	M14	65	2.559	4	**006-1142**	-
PM 65	Steel	Class 8 .8 to ISO 898	Bolts	M14	70	2.756	4	**006-1143**	**006-1146**
PM 80	Steel	Class 8 .8 to ISO 898	Bolts + nuts	M20	70	2.756	16	**027F2126**	-
PM 100	Steel	Class 8 .8 to ISO 898	Bolts + nuts	M20	75	2.953	16	**027F2127**	-

Flanges for ICV PM Valve housings

Tongue (oval):



Tongue (Square):



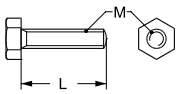
For product	Connection size [in.]	Connection size [mm]	Material	Flange type	Design	Connection standard	Connection type	Shape	Code no.
Flange version 3									
ICV PM 25	1	25	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3014**
ICV PM 25	¾	20	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3045**
ICV PM 25	¾	20	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1220**
ICV PM 25	1	25	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1225**
ICV PM 25	1¼	32	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1230**
ICV PM 25	¾	20	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3031**
ICV PM 25	1	25	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3032**
ICV PM 25	1¼	32	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3033**
ICV PM 25	¾	20	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2001**
ICV PM 25	1	25	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2002**
ICV PM 25	¾	20	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1001**
ICV PM 25	1	25	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1002**
ICV PM 25	-	22	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1222**
ICV PM 25	-	28	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1228**
ICV PM 25	⅞	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1223**
ICV PM 25	1⅛	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1229**
Flange version 10									
ICV PM 32	1½	40	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**192H3016**
ICV PM 32	1¼	32	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2332**
ICV PM 32	1½	40	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2340**
ICV PM 32	1⅜	-	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2335**
Flange version 11									
ICV PM 40	2	50	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**192H3018**
ICV PM 40	1½	40	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2440**
ICV PM 40	2	50	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2450**
ICV PM 40	1½	40	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Square	**027N2004**
ICV PM 40	-	42	Steel	Set	Tongue/tongue	EN 1254	Soldering	Square	**027L2442**
ICV PM 40	1⅝	-	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2441**
Flange version 12									
ICV PM 50	2	50	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2550**
ICV PM 50	2½	65	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2565**
ICV PM 50	2	50	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Square	**027N2005**
ICV PM 50	2⅛	54	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2554**
Flange version13									
ICV PM 65	2½	65	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2665**
ICV PM 65	3	80	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2680**
ICV PM 65	-	76	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2666**
ICV PM 65	2⅝	-	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2676**

Flange version 3, 10, 11, 12, 13: Each code no. includes two flanges.

Flange gaskets

For flange version	Gasket dimensions ID x OD x h [mm]	Gasket dimensions ID x OD x h [in.]	Multipack qty	Code no.
10	42.5 × 57.5 × 1.5	1.673 × 2.264 × 0.059	40	**027F2176**
11	51 × 65 × 1.5	2.008 × 2.559 × 0.059	40	**027F2177**
12	60.5 × 75.5 × 1.5	2.382 × 2.972 × 0.059	40	**027F2178**

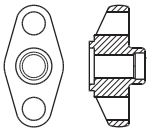
Bolts and nuts for flange connections



Type	Material	Material property class	Description	M [mm]	L [mm]	L [in.]	Qty	Code no. Bolts	Code no. Nuts
ICV PM 25	Stainless steel	Class A2/A4 to DIN 267	Bolts	M12	45	1.772	4	**027F2220**	-
ICV PM 32 / ICV PM 40	Stainless steel	Class A2/A4 to DIN 267	Bolts	M12	45	1.772	8	**027F2221**	-
ICV PM 50	Stainless steel	Class A2/A4 to DIN 267	Bolts + nuts	M14	65	2.559	8	**027F2222**	-
ICV PM 25-40	Steel	Class 8 .8 to ISO 898	Bolts	M12	45	1.772	4	**006-1141**	-
ICV PM 50	Steel	Class 8 .8 to ISO 898	Bolts	M14	65	2.559	4	**006-1142**	-
ICV PM 65	Steel	Class 8 .8 to ISO 898	Bolts	M14	70	2.756	4	**006-1143**	**006-1146**

Flanges for PMC Pilot operated servo valves

Tongue (oval):

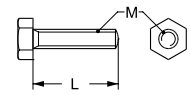


Flange version 3

For product	Connection size [in.]	Connection size [mm]	Material	Flange type	Design	Connection standard	Connection type	Shape	Code no.
PMC 5 / PMC 8 / PMC 12 / PMC 20	1	25	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3014**
PMC 5 / PMC 8 / PMC 12 / PMC 20	¾	20	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3045**
PMC 5 / PMC 8 / PMC 12 / PMC 20	¾	20	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1220**
PMC 5 / PMC 8 / PMC 12 / PMC 20	1	25	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1225**
PMC 5 / PMC 8 / PMC 12 / PMC 20	1¼	32	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1230**
PMC 5 / PMC 8 / PMC 12 / PMC 20	¾	20	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3031**
PMC 5 / PMC 8 / PMC 12 / PMC 20	1	25	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3032**
PMC 5 / PMC 8 / PMC 12 / PMC 20	1¼	32	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3033**
PMC 5 / PMC 8 / PMC 12 / PMC 20	¾	20	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2001**
PMC 5 / PMC 8 / PMC 12 / PMC 20	1	25	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2002**
PMC 5 / PMC 8 / PMC 12 / PMC 20	¾	20	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1001**
PMC 5 / PMC 8 / PMC 12 / PMC 20	1	25	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1002**
PMC 5 / PMC 8 / PMC 12 / PMC 20	-	22	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1222**
PMC 5 / PMC 8 / PMC 12 / PMC 20	-	28	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1228**
PMC 5 / PMC 8 / PMC 12 / PMC 20	⅞	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1223**
PMC 5 / PMC 8 / PMC 12 / PMC 20	1⅛	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1229**

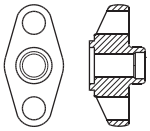
Flange version 3: Each code no. includes two flanges.

Bolts for flange connections



Type	Material	Material property class	M [mm]	L [mm]	L [in.]	Qty	Code no.
PMC 5 / PMC 8 / PMC 12 / PMC 20	Stainless steel	Class A2/A4 to DIN 267	M12	45	1.772	4	**027F2220**
PMC 5 / PMC 8 / PMC 12 / PMC 20	Steel	Class 8 .8 to ISO 898	M12	45	1.772	4	**006-1141**

Flanges for CVMD Pressure regulating valves

	For product	Connection size [in.]	Connection size [mm]	Material	Flange 'type	Design	Connection standard	Connection type	Shape	Code no.
Tongue (oval): 	**Flange version 1.3**									
	CVMD	¾	20	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3254**

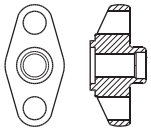
Flange version 1.3: Each code no. includes two flanges.

Flange gaskets

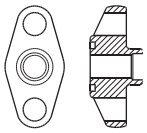
For flange version	Gasket dimensions ID x OD x h [mm]	Gasket dimensions ID x OD x h [in.]	Multipack qty	Code no.
1.3	22 × 32 × 1.0	0.866 × 1.260 × 0.039	40	**020-2133**

Flanges for FA Strainers

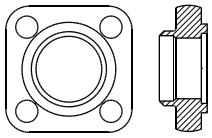
Tongue (oval):



Groove (oval):



Tongue (Square):



For product	Connection size [in.]	Connection size [mm]	Material	Flange type	Design	Connection standard	Connection type	Shape	Code no.
Flange version 1.1									
FA 15	3/8	10	Steel	Set	Groove	EN 10220	Butt welding	Oval	**006-1111**
FA 15	1/2	15	Steel	Set	Groove	EN 10220	Butt welding	Oval	**006-1112**
FA 15	3/4	20	Steel	Set	Groove	EN 10220	Butt welding	Oval	**006-1113**
FA 15	1/2	15	Brass	Set	Groove	ASME B 16.22	Soldering	Oval	**006-1150**
FA 15	5/8	16	Brass	Set	Groove	ASME B 16.22	Soldering	Oval	**006-1151**
FA 15	7/8	22	Brass	Set	Groove	ASME B 16.22	Soldering	Oval	**006-1153**
FA 15	1	25	Brass	Set	Groove	ASME B 16.22	Soldering	Oval	**006-1158**
Flange version 1.3									
FA 20	3/4	20	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3254**
Flange version 2.1									
FA 20	1/2	15	Steel	Set	Tongue/Groove	EN 10220	Butt welding	Oval	**006-1114**
FA 20	3/4	20	Steel	Set	Tongue/Groove	EN 10220	Butt welding	Oval	**006-1115**
FA 20	1	25	Steel	Set	Tongue/Groove	EN 10220	Butt welding	Oval	**006-1116**
Flange version 2.3									
FA 20	-	22	Brass	Set	Tongue/Groove	EN 1254	Soldering	Oval	**006-1180**
FA 20	1 1/8	-	Brass	Set	Tongue/Groove	ASME B 16.22	Soldering	Oval	**006-1157**
Flange version 3									
FA 20	3/4	20	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3045**
FA 20	1	25	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3014**
FA 20	3/4	20	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1220**
FA 20	1	25	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1225**
FA 20	1 1/4	32	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1230**
FA 20	3/4	20	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3031**
FA 20	1	25	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3032**
FA 20	1 1/4	32	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3033**
FA 20	3/4	20	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2001**
FA 20	1	25	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2002**
FA 20	3/4	20	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1001**
FA 20	-	22	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1222**
FA 20	-	28	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1228**
FA 20	7/8	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1223**
FA 20	1 1/8	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1229**
Flange version 5									
FA 20	1	25	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**006-1117**
FA 25	1 1/4	32	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N1032**
FA 25	1 1/8	-	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**006-1159**

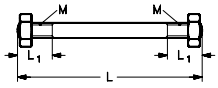
Flange version 1.1: Each code no. includes two flanges, two flange gaskets, two staybolts (M12 × 127 mm), and four nuts (M12).
Flange version 1.3: Each code no. includes two flanges.
Flange version 2.1: Each code no. includes two flanges, two flange gaskets, two staybolts, and four nuts.
Flange version 2.3: Each code no. includes two flanges.
Flange version 3: Each code no. includes two flanges.
Flange version 5: Each code no. includes two flanges

Flange gaskets

For flange version	Gasket dimensions ID x OD x h [mm]	Gasket dimensions ID x OD x h [in.]	Multipack qty	Code no.
1.1 + 1.3	22 × 32 × 1.0	0.866 × 1.260 × 0.039	40	**020-2133**
5	45.5 × 59.5 × 1.5	1.791 × 2.342 × 0.059	40	**026H0050**

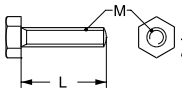
Flanges for FA Strainers (continued)

Set of staybolts and gaskets for flanges



Set of staybolts and gaskets for	Material	Thread [M]	L_1 [mm]	L_1 [in.]	L [mm]	L [in.]	Staybolts qty	Nuts qty	Gaskets qty	Code no.
FA 15	Steel	M12	19	0.748	107	4.212	2	4	3	**006-1101**
FA 15 / FA 20	Steel	M12	19	0.748	127	5.000	2	4	3	**006-1108**
FA 20	Steel	M12	22	0.866	160	6.299	2	4	3	**006-1136**

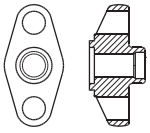
Bolts for flange connections



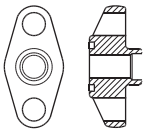
Type	Material	Material property class	M [mm]	L [mm]	L [in.]	Qty	Code no.
FA 25	Steel	Class 8 .8 to ISO 898	M12	35	1.378	4	**006-1139**

Flanges for NRVA Check valves

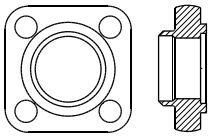
Tongue (oval):



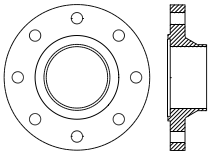
Groove (oval):



Tongue (Square):



Tongue (Round):



For product	Connection size [in.]	Connection size [mm]	Material	Flange type	Design	Connection standard	Connection type	Shape	Code no.
Flange version 1									
NRVA 15 / NRVA 20	¼	6	Steel	Single	Tongue	EN 10220	Butt welding	Oval	**006-1118**
NRVA 15 / NRVA 20	¼	6	Steel	Single	Groove	EN 10220	Butt welding	Oval	**006-1119**
NRVA 15 / NRVA 20	⅜	10	Steel	Single	Tongue	EN 10220	Butt welding	Oval	**006-1120**
NRVA 15 / NRVA 20	⅜	10	Steel	Single	Groove	EN 10220	Butt welding	Oval	**006-1121**
NRVA 15 / NRVA 20	½	15	Steel	Single	Tongue	EN 10220	Butt welding	Oval	**006-1122**
NRVA 15 / NRVA 20	½	15	Steel	Single	Groove	EN 10220	Butt welding	Oval	**006-1123**
NRVA 15 / NRVA 20	¾	20	Steel	Single	Tongue	EN 10220	Butt welding	Oval	**006-1124**
NRVA 15 / NRVA 20	¾	20	Steel	Single	Groove	EN 10220	Butt welding	Oval	**006-1125**
NRVA 15 / NRVA 20	½	-	Brass	Single	Tongue	ASME B 16.22	Soldering	Oval	**006-1160**
NRVA 15 / NRVA 20	½	-	Brass	Single	Groove	ASME B 16.22	Soldering	Oval	**006-1161**
NRVA 15 / NRVA 20	⅝	-	Brass	Single	Tongue	ASME B 16.22	Soldering	Oval	**006-1162**
NRVA 15 / NRVA 20	⅝	-	Brass	Single	Groove	ASME B 16.22	Soldering	Oval	**006-1163**
NRVA 15 / NRVA 20	⅞	-	Brass	Single	Tongue	ASME B 16.22	Soldering	Oval	**006-1176**
NRVA 15 / NRVA 20	⅞	-	Brass	Single	Groove	ASME B 16.22	Soldering	Oval	**006-1177**
NRVA 15 / NRVA 20	1	-	Brass	Single	Tongue	ASME B 16.22	Soldering	Oval	**006-1166**
Flange version 1.2									
NRVA 15 / NRVA 20	-	15 x 15	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027B0181**
NRVA 15 / NRVA 20	⅝ x ⅞	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**006-1195**
Flange version 1.3									
NRVA 15 / NRVA 20	¾	20	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3254**
NRVA 15 / NRVA 20	⅜	10	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1112**
NRVA 15 / NRVA 20	½	15	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1115**
NRVA 15 / NRVA 20	¾	20	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1120**
NRVA 15 / NRVA 20	⅜	10	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N2020**
NRVA 15 / NRVA 20	½	15	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N2021**
NRVA 15 / NRVA 20	¾	20	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N2022**
NRVA 15 / NRVA 20	⅜	10	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2010**
NRVA 15 / NRVA 20	½	15	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2011**
NRVA 15 / NRVA 20	⅜	10	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1005**
NRVA 15 / NRVA 20	½	15	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1006**
NRVA 15 / NRVA 20	-	16	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1116**
NRVA 15 / NRVA 20	-	22	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1122**
NRVA 15 / NRVA 20	⅝	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1117**
NRVA 15 / NRVA 20	⅞	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1123**
Flange version 4									
NRVA 25 / NRVA 32	1	25	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N1026**
NRVA 25 / NRVA 32	1¼	32	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N1033**
NRVA 25 / NRVA 32	1	25	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Square	**027N2023**
NRVA 25 / NRVA 32	1¼	32	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Square	**027N2024**
NRVA 25 / NRVA 32	¾	20	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Square	**027N2012**
NRVA 25 / NRVA 32	1	25	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Square	**027N2013**
NRVA 25 / NRVA 32	1¼	32	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Square	**027N2016**
NRVA 25 / NRVA 32	¾	20	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Square	**027G1007**
Flange version 6									
NRVA 40 / NRVA 50	1½	40	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N1042**
NRVA 40 / NRVA 50	2	50	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N1051**
NRVA 40 / NRVA 50	1½	40	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Square	**027N2025**
NRVA 40 / NRVA 50	2	50	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Square	**027N2026**
NRVA 40 / NRVA 50	2⅛	54	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2554**
Flange version 8									
NRVA 65	2½	65	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Round	**027N1055**
NRVA 65	2½	65	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Round	**027N2027**

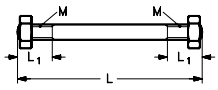
Flange version 1: Each code no. includes one flange and one flange gasket.
Flange version 1.2: Each code no. includes two flanges, two flange gaskets, two staybolts (M12 × 135 mm / M12 × 127 mm) and four nuts (M12).
Flange version 1.3: Each code no. includes two flanges.
Flange version 4: Each code no. includes two flanges.
Flange version 6: Each code no. includes two flanges.
Flange version 8: Each code no. includes two flanges.

Flanges for NRVA Check valves (continued)

Flange gaskets

For flange version	Gasket dimensions ID x OD x h [mm]	Gasket dimensions ID x OD x h [in.]	Multipack qty	Code no.
1 + 1.2 + 1.3	22 × 32 × 1.0	0.866 × 1.260 × 0.039	40	**020-2133**
4	42.5 × 57.5 × 1.5	1.673 × 2.264 × 0.059	40	**027F2176**
6	60.5 × 75.5 × 1.5	2.382 × 2.972 × 0.059	40	**027F2178**
8	94 × 110 × 2	3.701 × 4.331 × 0.079	40	**020-2136**

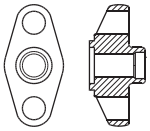
Set of staybolts and gaskets for flanges



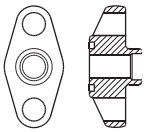
Set of staybolts and gaskets for	Material	Thread [M]	L_1 [mm]	L_1 [in.]	L [mm]	L [in.]	Staybolts qty	Nuts qty	Gaskets qty	Code no.
NRVA 15 / NRVA 20	Steel	M 12	19	0.748	115	4.527	2	4	3	**006-1107**
NRVA 25 / NRVA 32	Steel	M 12	12	0.472	148	5.827	4	8	2	**006-1135**
NRVA 40 / NRVA 50	Steel	M 12	22	0.866	167	6.575	4	8	2	**006-1137**
NRVA 65	Steel	M 16	25	0.984	200	7.874	8	16	2	**006-1138**

Flanges for NRVS Check valves

Tongue (oval):



Groove (oval):

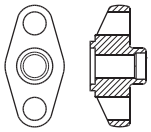


For product	Connection size [in.]	Connection size [mm]	Material	Flange type	Design	Connection standard	Connection type	Shape	Code no.
Standard + Special flange [1]									
NRVS 15	¾	20	Steel	Set	Groove/Tongue	EN 10220	Butt welding	Oval	**027N1255**
NRVS 25	1	25	Steel	Set	Groove/Tongue	EN 10220	Butt welding	Oval	**027N1254**
Standard + Special flange [2]									
NRVS 15	¾	20	Steel	Set	Groove/Groove	EN 10220	Butt welding	Oval	**027N1256**
NRVS 25	1	25	Steel	Set	Groove/Groove	EN 10220	Butt welding	Oval	**027N1257**

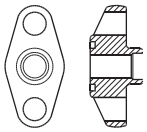
[1]) Each code no. includes one standard flange and one special flange, one gasket and 2 bolts.
[2]) Each code no. includes One standard flange and one special flange, two gasket, 2 bolts and 2 nuts.

Flanges for PMFL Liquid level regulating valves

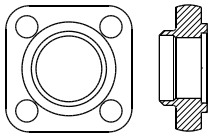
Tongue (oval):



Groove (oval):



Tongue (Square):



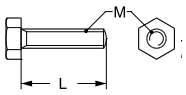
For product	Connection size [in.]	Connection size [mm]	Material	Flange type	Design	Connection standard	Connection type	Shape	Code no.
Flange version 3									
PMFL 80	1	25	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3014**
PMFL 80	¾	20	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3045**
PMFL 80	¾	20	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1220**
PMFL 80	1	25	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1225**
PMFL 80	1¼	32	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1230**
PMFL 80	¾	20	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3031**
PMFL 80	1	25	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3032**
PMFL 80	1¼	32	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3033**
PMFL 80	¾	20	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2001**
PMFL 80	1	25	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2002**
PMFL 80	¾	20	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1001**
PMFL 80	1	25	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1002**
PMFL 80	-	22	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1222**
PMFL 80	-	28	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1228**
PMFL 80	⅞	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1223**
PMFL 80	1⅛	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1229**
Flange version 10									
PMFL 125	1½	40	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**192H3016**
PMFL 125	1¼	32	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2332**
PMFL 125	1½	40	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2340**
PMFL 125	1⅜	-	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2335**
Flange version 11									
PMFL 200	2	50	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**192H3018**
PMFL 200	1½	40	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2440**
PMFL 200	2	50	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2450**
PMFL 200	1½	40	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Square	**027N2004**
PMFL 200	-	42	Steel	Set	Tongue/tongue	EN 1254	Soldering	Square	**027L2442**
PMFL 200	1⅝	-	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2441**
Flange version 12									
PMFL 300	2	50	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2550**
PMFL 300	2½	65	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2565**
PMFL 300	2	50	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Square	**027N2005**
PMFL 300	2⅛	54	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2554**

Flange version 3, 10, 11, 12: Each code no. includes two flanges.

Flange gaskets

For flange version	Gasket dimensions ID x OD x h [mm]	Gasket dimensions ID x OD x h [in.]	Multipack qty	Code no.
10	42.5 × 57.5 × 1.5	1.673 × 2.264 × 0.059	40	**027F2176**
11	51 × 65 × 1.5	2.008 × 2.559 × 0.059	40	**027F2177**
12	60.5 × 75.5 × 1.5	2.382 × 2.972 × 0.059	40	**027F2178**

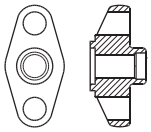
Bolts and nuts for flange connections



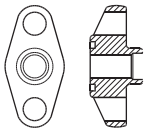
Type	Material	Material property class	Description	M [mm]	L [mm]	L [in.]	Qty	Code no. Bolts	Code no. Nuts
PMFL 80	Stainless steel	Class A2/A4 to DIN 267	Bolts	M12	45	1.772	4	**027F2220**	-
PMFL 125	Stainless steel	Class A2/A4 to DIN 267	Bolts	M12	45	1.772	8	**027F2221**	-
PMFL 300	Stainless steel	Class A2/A4 to DIN 267	Bolts + nuts	M14	65	2.559	8	**027F2222**	-
PMFL 80 / PMFL 125 / PMFL 200	Steel	Class 8 .8 to ISO 898	Bolts	M12	45	1.772	4	**006-1141**	
PMFL 300	Steel	Class 8 .8 to ISO 898	Bolts	M14	65	2.559	4	**006-1142**	**006-1146**

Flanges for PMFH Liquid level regulating valves

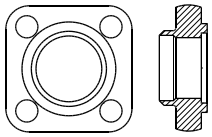
Tongue (oval):



Groove (oval):



Tongue (Square):



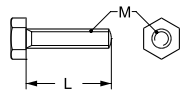
For product	Connection size [in.]	Connection size [mm]	Material	Flange type	Design	Connection standard	Connection type	Shape	Code no.
Flange version 3									
PMFH 80	1	25	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3014**
PMFH 80	¾	20	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**192H3045**
PMFH 80	¾	20	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1220**
PMFH 80	1	25	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1225**
PMFH 80	1¼	32	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Oval	**027N1230**
PMFH 80	¾	20	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3031**
PMFH 80	1	25	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3032**
PMFH 80	1¼	32	Steel	Set	Tongue/tongue	ASME B 36.10M	Butt welding	Oval	**027N3033**
PMFH 80	¾	20	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2001**
PMFH 80	1	25	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Oval	**027N2002**
PMFH 80	¾	20	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1001**
PMFH 80	1	25	Steel	Set	Tongue/tongue	ANSI/ASME B1.20.1	FPT inside thread, NPT	Oval	**027G1002**
PMFH 80	-	22	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1222**
PMFH 80	-	28	Brass	Set	Tongue/tongue	EN 1254	Soldering	Oval	**027L1228**
PMFH 80	⅞	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1223**
PMFH 80	1⅛	-	Brass	Set	Tongue/tongue	ASME B 16.22	Soldering	Oval	**027L1229**
Flange version 10									
PMFH 125	1½	40	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**192H3016**
PMFH 125	1¼	32	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2332**
PMFH 125	1½	40	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2340**
PMFH 125	1⅜	-	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2335**
Flange version 11									
PMFH 200	2	50	Stainless steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**192H3018**
PMFH 200	1½	40	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2440**
PMFH 200	2	50	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2450**
PMFH 200	1½	40	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Square	**027N2004**
PMFH 200	-	42	Steel	Set	Tongue/tongue	EN 1254	Soldering	Square	**027L2442**
PMFH 200	1⅝	-	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2441**
Flange version 12									
PMFH 300	2	50	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2550**
PMFH 300	2½	65	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2565**
PMFH 300	2	50	Steel	Set	Tongue/tongue	ASME B 16.11	Socket welding	Square	**027N2005**
PMFH 300	2⅛	54	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2554**
Flange version13									
PMFH 500	2½	65	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2665**
PMFH 500	3	80	Steel	Set	Tongue/tongue	EN 10220	Butt welding	Square	**027N2680**
PMFH 500	-	76	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2666**
PMFH 500	2⅝	-	Steel	Set	Tongue/tongue	ASME B 16.22	Soldering	Square	**027L2676**

Flange version 3, 10, 11, 12, 13: Each code no. includes two flanges.

Flange gaskets

For flange version	Gasket dimensions ID x OD x h [mm]	Gasket dimensions ID x OD x h [in.]	Multipack qty	Code no.
10	42.5 × 57.5 × 1.5	1.673 × 2.264 × 0.059	40	**027F2176**
11	51 × 65 × 1.5	2.008 × 2.559 × 0.059	40	**027F2177**
12	60.5 × 75.5 × 1.5	2.382 × 2.972 × 0.059	40	**027F2178**

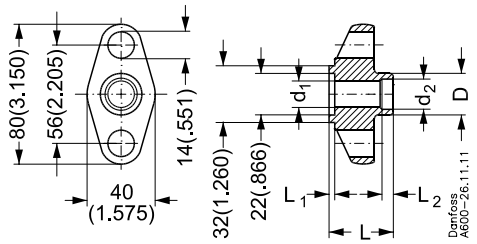
Bolts and nuts for flange connections



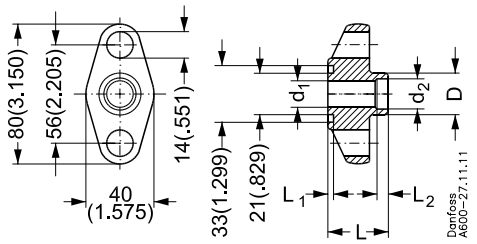
Type	Material	Material property class	Description	M [mm]	L [mm]	L [in.]	Qty	Code no. Bolts	Code no. Nuts
PMFH 80	Stainless steel	Class A2/A4 to DIN 267	Bolts	M12	45	1.772	4	**027F2220**	-
PMFH 125 / PMFH 200	Stainless steel	Class A2/A4 to DIN 267	Bolts	M12	45	1.772	8	**027F2221**	-
PMFH 300	Stainless steel	Class A2/A4 to DIN 267	Bolts + nuts	M14	65	2.559	8	**027F2222**	-
PMFH 80 / PMFH 125 / PMFH 200	Steel	Class 8 .8 to ISO 898	Bolts	M12	45	1.772	4	**006-1141**	-
PMFH 300	Steel	Class 8 .8 to ISO 898	Bolts	M14	65	2.559	4	**006-1142**	**006-1146**
PMFH 500	Steel	Class 8 .8 to ISO 898	Bolts	M14	70	2.756	4	**006-1143**	**006-1146**

Flange version 1 (1, 1.1, 1.2, 1.3)

Tongue flange:



Groove flange:



Butt welding EN 10220

Tongue flanges:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]	L_2 [mm]	L_2 [in.]
6	¼	14	0.551	8	0.315	10	0.394	32.5	1.279	3	0.118	6	0.236
10	⅜	18	0.709	10	0.394	14	0.551	32.5	1.279	3	0.118	6	0.236
15	½	22	0.866	14	0.551	17	0.669	32.5	1.279	3	0.118	6	0.236
20	¾	27	1.063	19	0.748	22	0.866	32.5	1.279	3	0.118	6	0.236

Butt welding EN 10220

Groove flanges:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]	L_2 [mm]	L_2 [in.]
6	¼	14	0.551	8	0.315	10	0.394	32.5	1.279	2	0.079	6	0.236
10	⅜	18	0.709	10	0.394	14	0.551	32.5	1.279	2	0.079	6	0.236
15	½	22	0.866	14	0.551	17	0.669	32.5	1.279	2	0.079	6	0.236
20	¾	27	1.063	19	0.748	22	0.866	32.5	1.279	2	0.079	6	0.236

Soldering ASME B 16.22

Tongue flanges:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]	L_2 [mm]	L_2 [in.]
-	½	17	0.669	10	0.394	12.7	0.500	29.5	1.161	3	0.118	17.5	0.689
-	⅝	21	0.827	13	0.512	15.9	0.626	29.5	1.161	3	0.118	20.5	0.807
-	⅞	27	1.063	19	0.748	22.2	0.874	29.5	1.161	3	0.118	22	0.866
-	1	30	1.181	18	0.709	25.5	1.004	29.5	1.161	3	0.118	22	0.866

Soldering ASME B 16.22

Groove flanges:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]	L_2 [mm]	L_2 [in.]
-	½	17	0.669	10	0.394	12.7	0.500	26.5	1.043	3	0.118	17.5	0.689
-	⅝	21	0.827	13	0.512	15.9	0.626	26.5	1.043	3	0.118	20.5	0.807
-	⅞	27	1.063	18	0.709	22.2	0.874	26.5	1.043	3	0.118	22	0.866

Butt welding ASME B 36.10M

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]	L_2 [mm]	L_2 [in.]
10	⅜	17.1	0.673	10.7	0.421	10.7	0.421	32.5	1.280	3	0.118	6	0.236
15	½	21.3	0.839	13.9	0.547	13.9	0.547	32.5	1.280	3	0.118	6	0.236
20	¾	26.9	1.059	18.9	0.744	18.9	0.744	32.5	1.280	3	0.118	6	0.236

Socket welding ASME B 16.11

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]	L_2 [mm]	L_2 [in.]
10	⅜	26	1.024	12.5	0.492	17.8	0.701	32.5	1.280	3	0.118	10	0.394
15	½	31.6	1.244	15.8	0.622	22	0.866	32.5	1.280	3	0.118	10	0.394

Flange version 1 (1.1, 1.2, 1.3) - continued

FPT inside thread, NPT (ANSI/ASME B 1.20.1)

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]
10	3/8	26	1.024	14.3	0.563	**3/8** in.-18 NPT	**3/8** in.-18 NPT	32.5	1.477	3	0.118
15	½	31.6	1.244	17.8	0.701	½ in.-14 NPT	½ in.-14 NPT	32.5	1.280	3	0.118

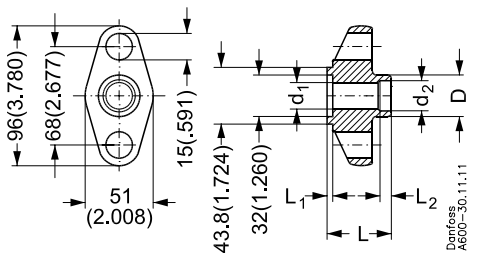
Soldering EN 1254

Tongue flange sets:

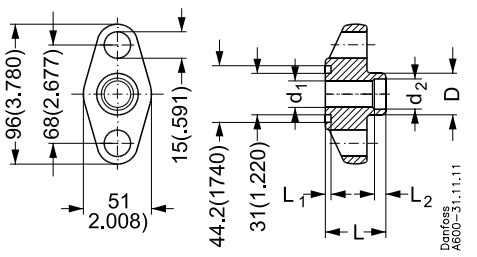
Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]	L_2 [mm]	L_2 [in.]
16	-	21	0.827	13	0.512	16	0.630	29.5	2.122	3	0.118	15	0.591
22	-	27	1.063	19	0.748	22.1	0.869	29.5	1.161	3	0.118	22	0.866

Flange version 2 (2.1)

Tongue flange



Groove flange



Butt welding EN 10220

Tongue flanges:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]	L_2 [mm]	L_2 [in.]
15	½	22	0.866	14	0.551	17	0.669	35	1.378	3	0.118	6	0.236
20	¾	27	1.063	19	0.748	22	0.866	35	1.378	3	0.118	6	0.236
25	1	34	1.338	26	1.024	18	1.102	37.5	1.476	3	0.118	6	0.236

Butt welding EN 10220

Groove flanges:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]	L_2 [mm]	L_2 [in.]
15	½	22	0.866	14	0.551	17	0.669	34.5	1.358	3	0.118	6	0.236
20	¾	27	1.063	19	0.748	22	0.866	34.5	1.358	3	0.118	6	0.236
25	1	34	1.338	26	1.024	18	1.102	34.5	1.358	3	0.118	6	0.236

Soldering EN 1254

Tongue/groove flanges:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]	L_2 [mm]	L_2 [in.]
22	-	27	1.063	19	0.748	22	0.866	30	1.181	3	0.118	22	0.866
22	-	27	1.063	19	0.748	22	0.866	30	1.181	3	0.118	22	0.866

Soldering ASME B 16.22

Tongue flanges:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]	L_2 [mm]	L_2 [in.]
-	1⅛	34	1.338	26	1.024	28.6	1.126	33	1.299	3	0.118	26	1.024

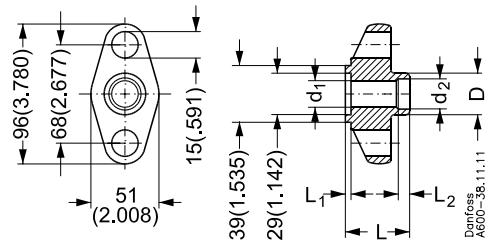
Soldering ASME B 16.22

Groove flanges:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]	L_2 [mm]	L_2 [in.]
-	1⅛	34	1.338	26	1.024	28.6	1.126	30	1.181	3	0.118	26	1.024

Flange version 3

Tongue flange



Butt welding EN 10220

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]	L_2 [mm]	L_2 [in.]
20	¾	27	1.063	19	0.748	22	0.866	35	1.378	3	0.118	6	0.236
25	1	34	1.339	26	1.024	28	1.102	37.5	1.476	3	0.118	6	0.236
32	1¼	43	1.693	26	1.024	37	1.457	37.5	1.476	3	0.118	6	0.236

Butt welding ANSI (B 36.10)

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]	L_2 [mm]	L_2 [in.]
20	¾	26.9	1.059	18.9	0.744	18.9	0.744	33	1.299	3	0.118	6	0.236
25	1	33.7	1.327	24.5	0.965	24.5	0.965	37.5	1.476	3	0.118	6	0.236
32	1¼	42.4	1.669	26	1.024	32.6	1.283	37.5	1.476	3	0.118	6	0.236

Socket welding ASME B 16.11

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]	L_2 [mm]	L_2 [in.]
20	¾	37.4	1.472	21	0.827	27.4	1.079	33	1.299	3	0.118	13	0.512
25	1	45.6	1.795	26.6	1.047	34.1	1.343	33	1.299	3	0.118	13	0.512

FPT inside thread, NPT, ANSI/ASME (B 1.20.1)

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]
20	¾	37.4	1.472	23	0.906	¾ in.-14 NPT	¾ in.-14 NPT	33	1.299	3	0.118
25	1	45.6	1.795	29	1.142	1 in.-11.5 NPT	1 in.-11.5 NPT	33	1.299	3	0.118

Soldering EN 1254

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]	L_2 [mm]	L_2 [in.]
22	-	34	1.338	19	0.748	22	0.866	32	1.260	4	0.157	16.5	0.650
28	-	34	1.338	26	1.024	28	1.102	34	1.338	4	0.157	26	1.024

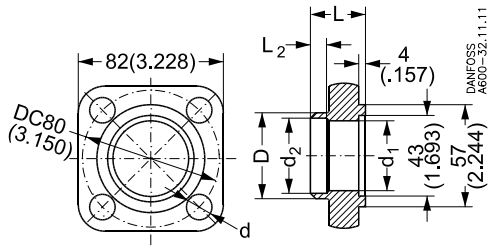
Soldering ASME B 16.22

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]	L_2 [mm]	L_2 [in.]
-	⅞	34	1.338	19	0.748	22.2	0.874	32	1.260	4	0.157	16.5	0.650
-	1⅛	34	1.338	26	1.024	28.6	1.126	34	1.338	4	0.157	26	1.024

Flange version 4

Tongue flange



Butt welding EN 10220

Tongue flange set:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	d [mm]	d [in.]
25	1	34	1.338	26	1.024	28	1.102	32	1.260	6	0.236	15	0.590
32	1¼	43	1.693	35	1.378	37.5	1.476	32	1.260	6	0.236	15	0.590

Butt welding ANSI (B 36.10)

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	d [mm]	d [in.]
25	1	33.7	1.327	24.5	0.965	24.5	0.965	32	1.260	10	0.394	15	0.591
32	1¼	42.4	1.669	32.6	1.2834	32.6	1.283	32	1.260	10	0.394	15	0.591

Socket welding ASME B 16.11

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	d [mm]	d [in.]
20	¾	37.4	1.472	21	0.827	27.4	1.079	32	1.260	10	0.394	15	0.591
25	1	45.7	1.799	26.6	1.047	34.1	1.343	32	1.260	10	0.394	15	0.591
32	1¼	55.3	2.177	35	1.378	42.9	1.689	39	1.535	15	0.591	15	0.591

FPT inside thread, NPT, ANSI/ASME (B 1.20.1)

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]
20	¾	37.4	1.472	23	0.905	¾ in.-14 NPT	¾ in.-14 NPT	32	1.260	10	0.394
25	1	45.6	1.795	29	1.142	1 in.-11.5 NPT	1 in.-11.5 NPT	32	1.260	10	0.394

Soldering DIN (2856)

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	d [mm]	d [in.]
35	-	47	1.850	32	1.260	35	1.378	36.5	1.437	25	0.984	14	0.551

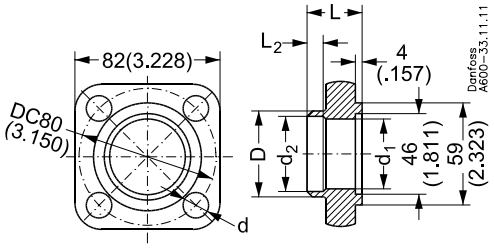
Soldering ASME B 16.22

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	d [mm]	d [in.]
-	1⅜	47	1.850	32	1.260	35	1.378	36.5	1.437	25	0.984	14	0.551

Flange version 5

Tongue flange



Butt welding EN 10220

Tongue flange set:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.].	L_2 [mm]	L_2 [in.]	d [mm]	d [in.]
25	1	34	1.338	26	1.024	28	1.102	32	1.260	6	0.260	15	0.591
32	1¼	43	1.693	35	1.378	37.5	1.476	32	1.260	6	0.260	15	0.591
40	1½	49	1.929	40	1.575	43	1.693	32	1.260	7	0.275	15	0.591

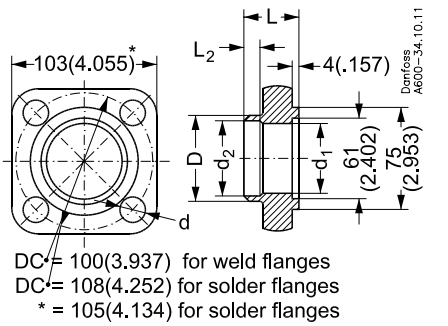
Butt welding EN 10220

Tongue/tongue flange set:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.].	L_2 [mm]	L_2 [in.]	d [mm]	d [in.]
-	1⅛	37	1.457	26	1.024	28.6	1.126	32	1.260	28	1.102	15	0.591
-	1⅝	52	2.047	38	1.496	41.3	1.626	32	1.260	10	0.394	15	0.591

Flange version 6

Tongue flange



Butt welding EN 10220

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	d [mm]	d [in.]
40	1½	49	1.929	40	1.575	43	1.693	39	1.535	7	0.275	15	0.591
50	2	60.5	2.382	52	2.047	54	2.126	39	1.535	8	0.315	15	0.591

Butt welding ANSI (B 36.10)

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]		d [mm]	d [in.]
40	1½	48.3	1.902	38.1	1.500	38.1	1.500	39	1.535		15	0.591
50	2	60.3	2.374	52.5	2.067	52.5	2.067	39	1.535		15	0.591

Socket welding ASME B 16.11

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	d [mm]	d [in.]
40	1½	61.9	2.437	40.8	1.606	49	1.929	39	1.535	13	0.512	15	0.591

Soldering DIN (2856)

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	d [mm]	d [in.]
54	-	64	2.520	50	1.969	54	2.130	45.5	1.791	33	1.299	16	0.630

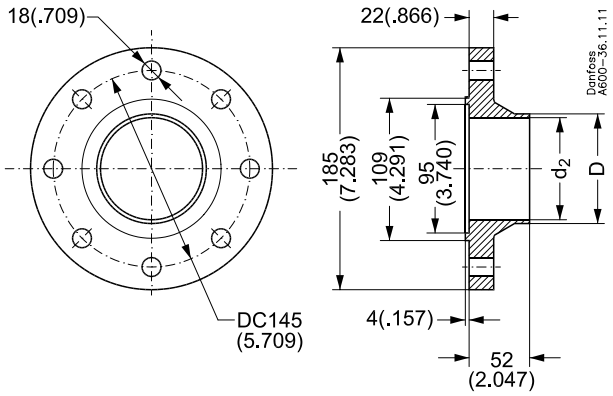
Soldering ASME B 16.22

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	d [mm]	d [in.]
-	2⅛	64	2.520	50	1.969	54	2.130	45.5	1.791	33	1.299	16	0.630

Flange version 8

Tongue flange



Butt welding EN 10220

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_2 [mm]	d_2 [in.]	
65	2½	76	2.992	70.3	2.768	

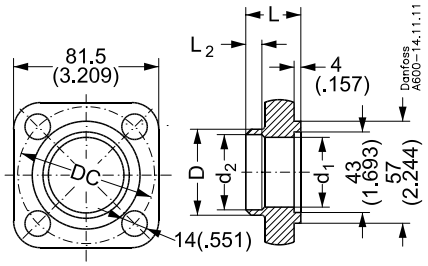
Butt welding ANSI (B 36.10)

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_2 [mm]	d_2 [in.]	
65	2½	73	2.874	62.5	2.461	

Flange version 10

Tongue flange



Butt welding EN 10220

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	DC [mm]	DC [in.]
32	1¼	43	1.693	37	1.457	37	1.457	36.5	1.437	15	0.590	80	3.150
40	1½	49	1.929	38	1.496	43	1.693	36.5	1.437	15	0.590	80	3.150

Butt welding ASME B 16.22

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]		DC [mm]	DC [in.]
32	1¼	42.4	1.669	32.6	1.283	32.6	1.283	36.5	1.437		80	3.150
40	1½	48.3	1.902	38.1	1.500	38.1	1.500	36.5	1.437		80	3.150

Socket welding ASME B 16.11

Tongue flanges:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	DC [mm]	DC [in.]
32	1¼	52	2.047	35	1.378	42.9	1.689	36.5	1.437	13	1.512	80	3.150

Soldering DIN (2856)

Tongue flanges:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	DC [mm]	DC [in.]
35	-	47	1.850	32	1.260	45	1.378	36.5	1.437	25	0.984	14	0.551

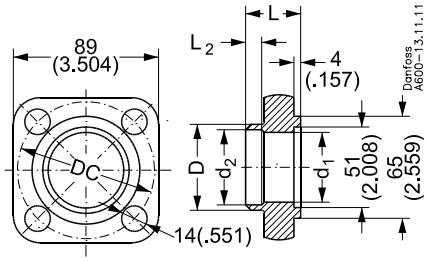
Soldering ASME B 16.22

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	DC [mm]	DC [in.]
-	1⅜	47	1.850	32	1.260	45	1.378	36.5	1.437	25	0.984	14	0.551

Flange version 11

Tongue flange



Butt welding EN 10220

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	DC [mm]	DC [in.]
40	1½	49	1.929	43	1.693	43	1.693	43.5	1.712	15	0.590	90	3.543
50	2	60.5	2.382	49	1.929	54	2.126	43.5	1.712	15	0.590	90	3.543

Butt welding ANSI (B 36.10)

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]		DC [mm]	DC [in.]
40	1½	48.2	1.898	38.1	1.500	38.1	1.500	43.5	1.713		90	3.543
50	2	60.3	2.374	49	1.929	49	1.929	43.5	1.713		90	3.543

Butt welding ASME B 16.11

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	DC [mm]	DC [in.]
40	1½	61.9	2.437	40.8	1.606	48.9	1.925	43.5	1.713	13	0.512	90	3.543

Soldering din (2856)

Tongue flange set:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	DC [mm]	DC [in.]
42	-	54	2.126	38	1.496	41	1.614	43.5	1.712	28	1.102	90	3.543

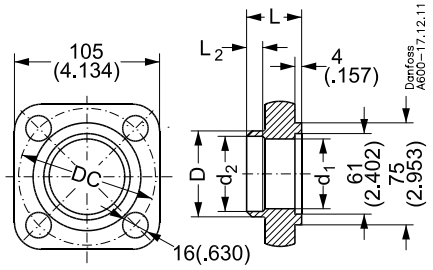
Soldering ASME B 16.22

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	DC [mm]	DC [in.]
-	1⅝	54	2.126	38	1.496	41	1.614	43.5	1.712	28	1.102	90	3.543

Flange version 12

Tongue flange



Butt welding EN 10220

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	DC [mm]	DC [in.]
50	2	60.5	2.382	54	2.126	54	2.126	45.5	1.791	21	0.827	108	4.252
65	2½	76.5	3.012	59	2.323	70	2.756	45.5	1.791	21	0.827	108	4.252

Butt welding ANSI (B 36.10)

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	DC [mm]	DC [in.]
50	2	60.3	2.374	52.5	2.067	52.5	2.067	45.5	1.791			108	4.252
65	2½	73	2.874	59	2.323	62.5	2.461	45.5	1.791	6	0.236	108	4.252

Socket welding ASME B 16.11

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	DC [mm]	DC [in.]
50	2	75.5	2.972	61	2.402	61.4	2.417	45.5	1.791	17	0.669	108	4.252

Soldering DIN (2856)

Tongue flange set:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	DC [mm]	DC [in.]
54	-	65	2.559	50	1.969	54.1	2.130	45.5	1.791	33	1.299	108	4.252

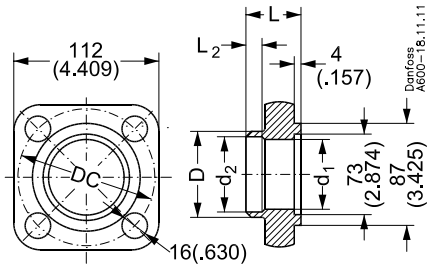
Soldering ASME B 16.22

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	DC [mm]	DC [in.]
-	2⅛	65	2.559	50	1.969	54.1	2.130	45.5	1.791	33	1.299	108	4.252

Flange version 13

Tongue flange



Butt welding EN 10220

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	DC [mm]	DC [in.]
65	2½	76.5	3.012	70	2.756	70	2.756	47.5	1.870	21	0.827	118	4.646
80	3	89	3.504	71	2.795	82	3.228	47.5	1.870	21	0.827	118	4.646

Butt welding ANSI (B 36.10)

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	DC [mm]	DC [in.]
65	2½	73	2.874	62.6	2.465	62.6	2.465	47.5	1.870	10	0.394	118	4.646
80	3	88.9	3.500	71	2.795	77.9	3.067	47.5	1.870	10	0.394	118	4.646

Socket welding ASME B 16.11

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	DC [mm]	DC [in.]
65	2½	91.9	3.618	64	2.520	74.2	2.921	47.5	1.870	17	0.669	118	4.646

Soldering DIN (2856)

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	DC [mm]	DC [in.]
76	-	81	3.189	63	2.480	66.8	2.630	45.5	1.791	33	1.299	118	4.646

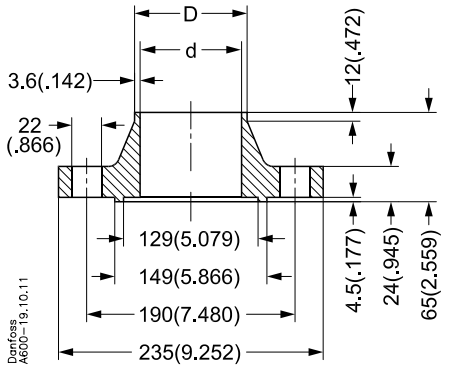
Soldering ASME B 16.22

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_2 [mm]	L_2 [in.]	DC [mm]	DC [in.]
-	2⅝	88	3.464	70	2.756	76	2.992	47.5	1.870	33	1.299	118	4.646

Flange version 14A

Tongue flange



Butt welding EN 10220

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d [mm]	d [in.]	
100	4	114.3	4.500	107.1	4.217	

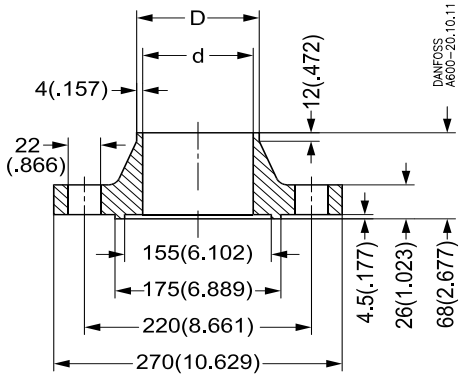
Butt welding ANSI (B 36.10)

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d [mm]	d [in.]	
100	4	114.3	4.500	102.3	4.028	

Flange version 14B

Tongue flange



Butt welding EN 10220

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d [mm]	d [in.]	
125	5	139.7	5.500	131.7	5.185	

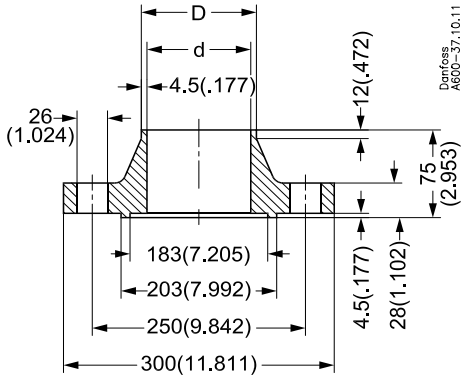
Butt welding ANSI (B 36.10)

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d [mm]	d [in.]	
125	5	141.3	5.563	128.2	5.047	

Flange version 14C

Tongue flange



Butt welding EN 10220

Tongue flange sets:

Size [mm]	Size [in.]	D [mm]	D [in.]	d [mm]	d [in.]	
150	6	168.3	6.626	159.3	6.272	

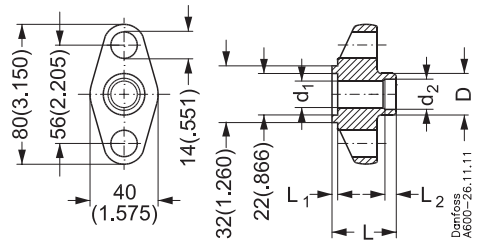
Butt welding ANSI (B 36.10)

Tongue flange sets:

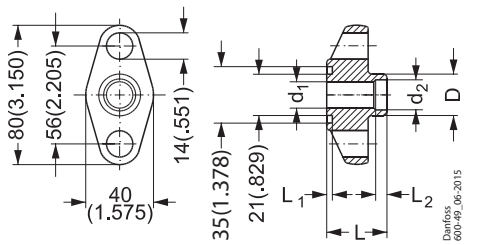
Size [mm]	Size [in.]	D [mm]	D [in.]	d [mm]	d [in.]	
150	6	168.3	6.626	154.1	6.067	

Flange for NRVS

Tongue flange



Groove flange



Butt welding EN 10220

Tongue flanges:

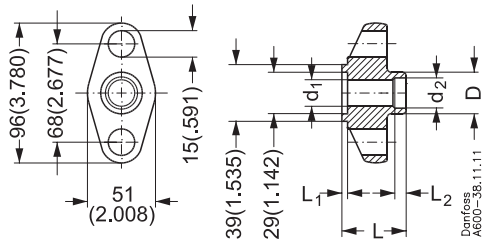
Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]	L_2 [mm]	L_2 [in.]
20	¾	27	1.063	19	0.748	22	0.866	33	1.299	3	0.118	6	0.236

Butt welding EN 10220

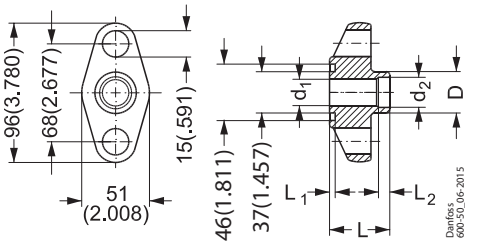
Groove flanges:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]	L_2 [mm]	L_2 [in.]
20	¾	27	1.063	19	0.748	22	0.866	36	1.417	3	0.118	6	0.236

Tongue flange



Groove flange



Butt welding EN 10220

Tongue flanges:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]	L_2 [mm]	L_2 [in.]
25	1	34	1.338	26	1.024	28	1.102	38	1.496	3	0.118	6	0.236

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Groove flanges:

Size [mm]	Size [in.]	D [mm]	D [in.]	d_1 [mm]	d_1 [in.]	d_2 [mm]	d_2 [in.]	L [mm]	L [in.]	L_1 [mm]	L_1 [in.]	L_2 [mm]	L_2 [in.]
25	1	34	1.338	26	1.024	28	1.102	38	1.496	3	0.118	6	0.236

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