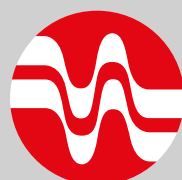
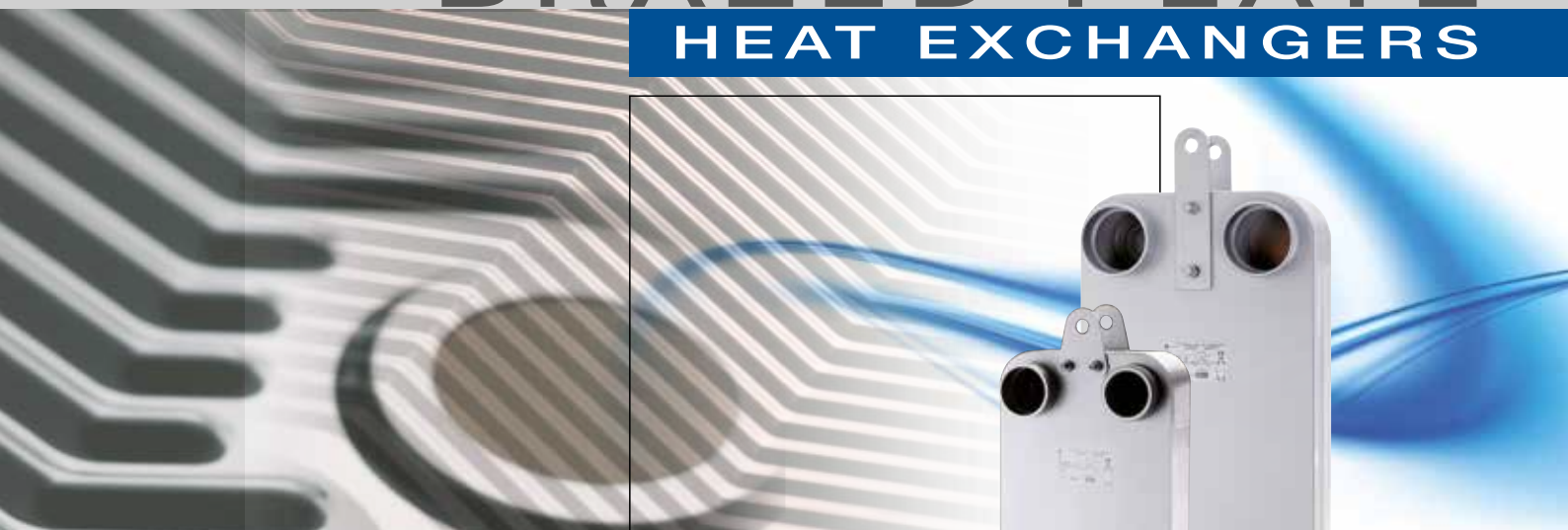


Advanced  
Heat  
Exchangers

# BRAZED PLATE HEAT EXCHANGERS



ONDA



ONDA is a leading company in Heat Exchange, partner of all main Chiller manufacturers. ONDA produces a complete range of Shell & Tube and Brazed Plate Heat Exchangers dedicated to Refrigeration and Air Conditioning. Our evaporators and condensers are available with different raw materials and well adapted to different refrigerants (R22, R134a, R410A...) from 3 to 850 Tons. All our products are manufactured under ISO 9001 with all the main worldwide certifications: ASME, GOST, GL, PED, RINA, UL.

ONDA Brazed plate heat exchangers carry the UL Mark for US and Canada (ref. no.SA32759)



## TECHNICAL INFORMATION

The main applications of our brazed plate heat exchangers are the evaporation and the condensation of the refrigerant gas in the air conditioning and refrigeration plants, the hot water production in heat pumps, the heat recovery.

Suitable refrigerants are all HCFCs, HFCs and others, unless they are compatible with the manufacturing materials.

The dimensional data contained in this catalogue are to be intended indicative taking into account the manufacturing tolerances. We reserve the right to apply changes to this catalogue without prior notice.

## MATERIALS

The top quality materials used to manufacture the ONDA brazed plate heat exchangers satisfy the requirements of the 97/23/EC Directive (Pressure Equipment Directive).

The type construction of the brazed plate heat exchangers consists of:

Plate heat exchangers	Stainless steel thickness 0.0138" (316L type).
Connections	Stainless steel (304L type).
Brazing material	Copper

## ACCESSORIES

Following optionals are available on request:

- Loose or welded mounting supports
- Insulation.



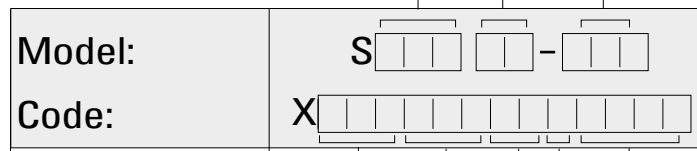
Configuration - connections SINGLE CIRCUIT								
<b>FOUR connections</b>								Code
F1	F2	W1	W2					<b>AA</b>
F1	F2			BW1	BW2			<b>AB</b>
F1	F2	W1			BW2			<b>AC</b>
F1	F2		W2	BW1				<b>AD</b>
	F2	W1		BW1		BF2		<b>AE</b>
	F2	W1			BW2	BF1		<b>AF</b>
F1			W2		BW2	BF1		<b>AG</b>
F1			W2	BW1		BF2		<b>AH</b>
<b>FIVE connections</b>								
F1	F2	W1	W2	BW1				<b>BA</b>
F1	F2	W1	W2			BW2		<b>BB</b>
F1	F2	W1		BW1	BW2			<b>BC</b>
F1	F2		W2	BW1	BW2			<b>BD</b>
<b>SIX connections</b>								
F1	F2	W1	W2	BW1	BW2			<b>CA</b>
F1	F2	W1	W2			BF1	BF2	<b>CB</b>
F1	F2	W1	W2	BW1			BF2	<b>CC</b>
F1	F2	W1	W2		BW2	BF1		<b>CD</b>
<b>SEVEN connections</b>								
F1	F2	W1	W2	BW1	BW2	BF1	BF2	<b>DA</b>
Configuration - connections DUAL CIRCUIT								
<b>SIX connections</b>								
F1	F2	G1	G2			BW1	BW2	<b>MA</b>
F1	F2	G1	G2	W1	W2			<b>MB</b>
<b>SEVEN connections</b>								
F1	F2	G1	G2	W1		BW1	BW2	<b>NA</b>
F1	F2	G1	G2		W2	BW1	BW2	<b>NB</b>
F1	F2	G1	G2	W1	W2	BW1		<b>NC</b>
F1	F2	G1	G2	W1	W2		BW2	<b>ND</b>
<b>EIGHT connections</b>								
F1	F2	G1	G2	W1	W2	BW1	BW2	<b>PA</b>

Both circuits are PNEUMATICALLY tested, to avoid any humidity contamination.

### Progressive number to identify size & type connections

**Operating conditions** D = evaporator with distributor H = High Pressure  
HD = High Pressure with distributor

Model 09, 12, 22, 82, 182, 202, 222, 404, 424, 606



Model 09, 12, 22, 82, 182, 202, 222, 404, 424, 606

Numbers of plates

Configuration connections

**Operating** Single circuit 0 = evaporator condensator 1 = evaporator with distributor  
2 = High Pressure 3 = High Pressure with distributor  
Dual Circuit: 4 = Cross circuit refrigerant 5 = Cross circuit refrigerant with distributor  
6 = High Pressure refrigerant 7 = High Pressure refrigerant plus distributor

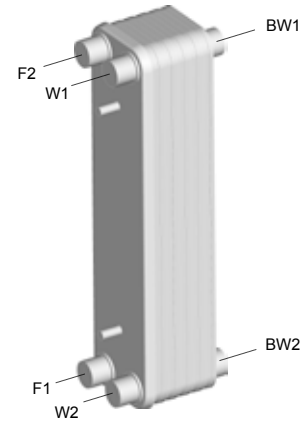
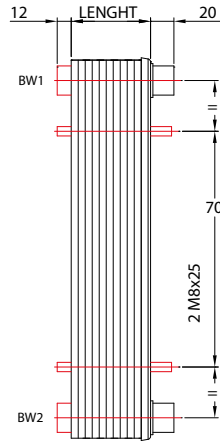
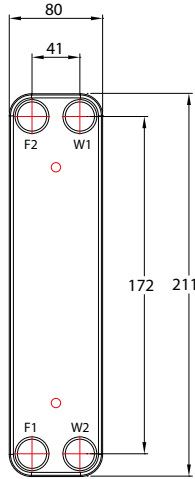
Progressive number to identify size & type connections

Made in Italy

PLEASE READ OPERATING AND INSTRUCTIONS MANUAL BEFORE USE

# S06

## SINGLE CIRCUIT



F1 INLET Refrigerant W1-BW1 INLET Secondary Fluid  
 F2 OUTLET Refrigerant W2-BW2 OUTLET Secondary Fluid

SPECIFICATIONS	S06	S06H	CONNECTIONS TYPE			
PRESSURE RANGE (bar)	Vacuum to 30	Vacuum to 45	Soldering	Threaded M	Threaded F	Rotalock
TEMPERATURE RANGE (°C)	-100°C to +120°C	-100°C to +120°C	S8	C22	F22	R19
MAXIMUM CONNECTIONS AVAILABLE (mm)	18	18	S12	C27	IF22	R25
MAXIMUM FLOW RATE (m3/h)	5,22	5,22	IS13	G22		
VOLUME / CHANNEL (liters)	0.0346	0.0346	S14	G27		
DIMENSIONS (mm)	80 x 211	80 x 211	S16	G30		
LENGHT CALCULATION (mm)	$N \times 2,45 + 9$	$N \times 2,45 + 9$	S18	IC22		
WEIGHT CALCULATION (kg)	$N \times 0.06 + 0.5$	$N \times 0.06 + 0.5$	S19	IC27		
	SAME "H" DESIGN		S20			
	Standard connections: F1 S18 F2 S20 W1-W2 C22					

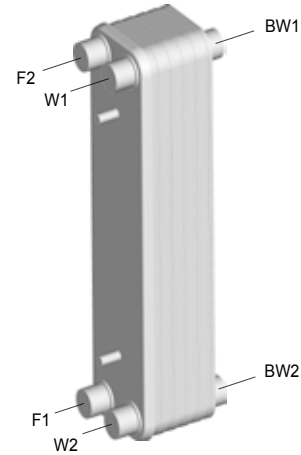
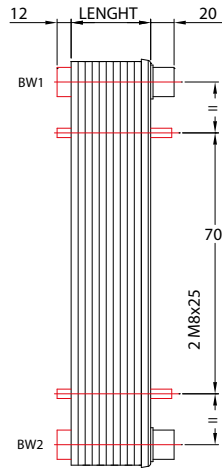
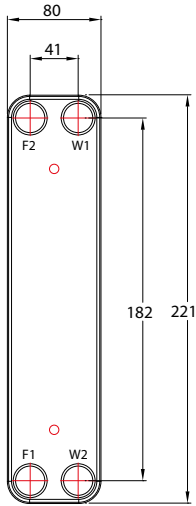
**N** Number of plates

### LETTER TO IDENTIFY CONNECTIONS TYPE

- S** Soldering Connections
- C** Conical Male Gas Threaded Connections
- G** Cylindric Male Gas Threaded Connections
- F** Female Gas Threaded Connections
- R** Rotalock Connections Male

PLATE HEAT EXCHANGER MATERIAL Stainless Steel 316L Thickness 0.35 mm

BRAZING MATERIAL Copper (Cu)



F1 INLET Refrigerant    W1-BW1 INLET Secondary Fluid  
 F2 OUTLET Refrigerant    W2-BW2 OUTLET Secondary Fluid

SPECIFICATIONS	S07	S07H	CONNECTIONS TYPE			
PRESSURE RANGE (bar)	Vacuum to 30	Vacuum to 45	Soldering	Threaded M	Threaded F	Rotalock
TEMPERATURE RANGE (°C)	-100°C to +120°C	-100°C to +120°C	S8	C22	F22	R19
MAXIMUM CONNECTIONS AVAILABLE (mm)	18	18	S12	C27		R25
MAXIMUM FLOW RATE (m3/h)	5,2	5,2	IS13	G22		
VOLUME / CHANNEL (liters)	0.036	0.036	S14	G27		
DIMENSIONS (mm)	80 x 221	80 x 221	S16	G30		
LENGHT CALCULATION (mm)	$N \times 2,45 + 9$	$N \times 2,45 + 9$	S18			
WEIGHT CALCULATION (kg)	$N \times 0.06 + 0.5$	$N \times 0.06 + 0.5$	S19			
	SAME "H" DESIGN		S20			
			Standard connections: F1 S18 F2 S20 W1-W2 C22			

**N** Number of plates

**LETTER TO IDENTIFY CONNECTIONS TYPE**

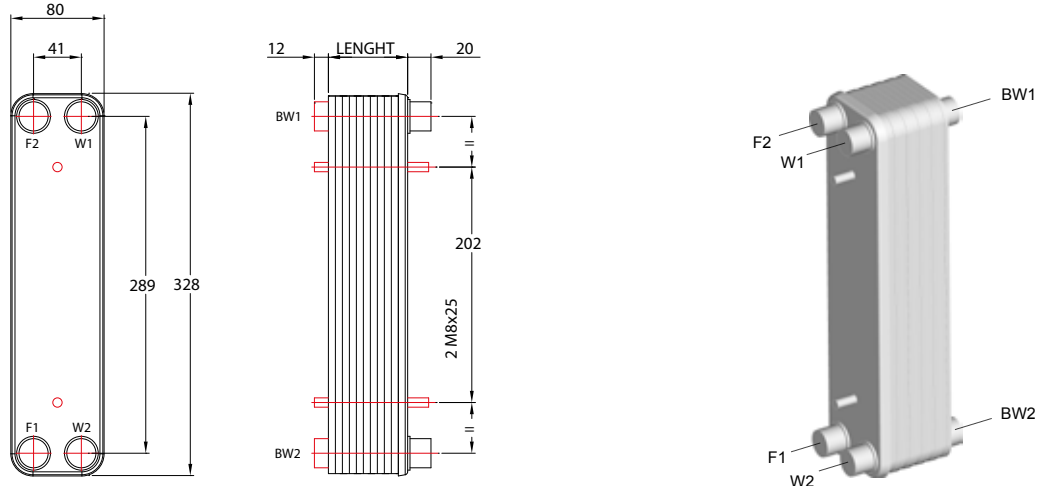
- S** Soldering Connections
- C** Conical Male Gas Threaded Connections
- G** Cylindric Male Gas Threaded Connections
- F** Female Gas Threaded Connections
- R** Rotalock Connections Male

PLATE HEAT EXCHANGER MATERIAL    Stainless Steel 316L    Thickness 0.3 mm

BRAZING MATERIAL    Copper (Cu)

# S09

## SINGLE CIRCUIT



F1 INLET Refrigerant    W1-BW1 INLET Secondary Fluid  
 F2 OUTLET Refrigerant    W2-BW2 OUTLET Secondary Fluid

SPECIFICATIONS	S09	S09H	CONNECTIONS TYPE			
PRESSURE RANGE (bar)	Vacuum to 30	Vacuum to 45	Soldering	Threaded M	Threaded F	Rotalock
TEMPERATURE RANGE (°C)	-100°C to +120°C	-100°C to +120°C	S8	C22	F22	R19
MAXIMUM CONNECTIONS AVAILABLE (mm)	18	18	S12	C27	IF22	R25
MAXIMUM FLOW RATE (m3/h)	5,22	5,22	IS13	G22		
VOLUME / CHANNEL (liters)	0.047	0.047	S14	G27		
DIMENSIONS (mm)	80 x 328	80 x 328	S16	G30		
LENGHT CALCULATION (mm)	$N \times 2,45 + 8$	$N \times 2,45 + 8$	S18	IC22		
WEIGHT CALCULATION (kg)	$N \times 0.09 + 1$	$N \times 0.09 + 1$	S19	IC27		
	SAME "H" DESIGN		S20			
			Standard connections: F1 S18 F2 S20 W1-W2 C22			

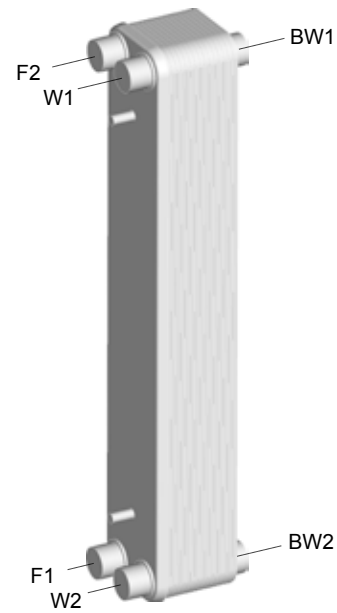
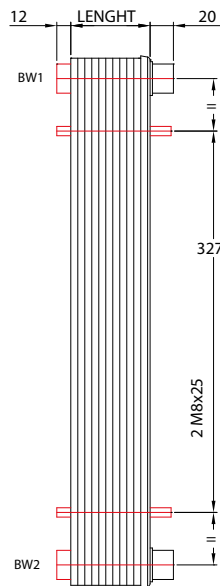
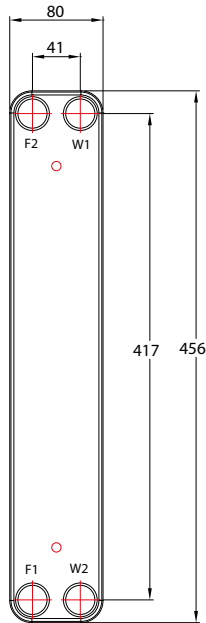
**N** Number of plates

### LETTER TO IDENTIFY CONNECTIONS TYPE

- S** Soldering Connections
- C** Conical Male Gas Threaded Connections
- G** Cylindric Male Gas Threaded Connections
- F** Female Gas Threaded Connections
- R** Rotalock Connections Male

PLATE HEAT EXCHANGER MATERIAL    Stainless Steel 316L    Thickness 0.35 mm

BRAZING MATERIAL    Copper (Cu)



F1 INLET Refrigerant W1-BW1 INLET Secondary Fluid  
F2 OUTLET Refrigerant W2-BW2 OUTLET Secondary Fluid

SPECIFICATIONS	S22	S22H	CONNECTIONS TYPE			
PRESSURE RANGE (bar)	Vacuum to 30	Vacuum to 45	Soldering	Threaded M	Threaded F	Rotalock
TEMPERATURE RANGE (°C)	-100°C to +120°C	-100°C to +120°C	S8	C22	F22	R19
MAXIMUM CONNECTIONS AVAILABLE (mm)	18	18	S12	C27	IF22	R25
MAXIMUM FLOW RATE (m3/h)	5,22	5,22	IS13	G22		
VOLUME / CHANNEL (liters)	0.064	0.064	S14	G27		
DIMENSIONS (mm)	80 x 456	80 x 456	S16	G30		
LENGHT CALCULATION (mm)	$N \times 2,45 + 8$	$N \times 2,45 + 12$	S18	IC22		
WEIGHT CALCULATION (kg)	$N \times 0.13 + 1,5$	$N \times 0.13 + 3,5$	S19	IC27		
			S20			
			Standard connections: F1 S18 F2 S20 W1-W2 C22			

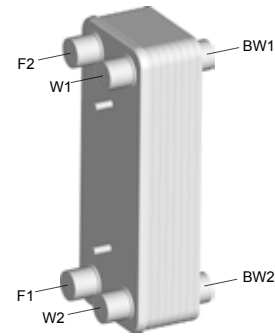
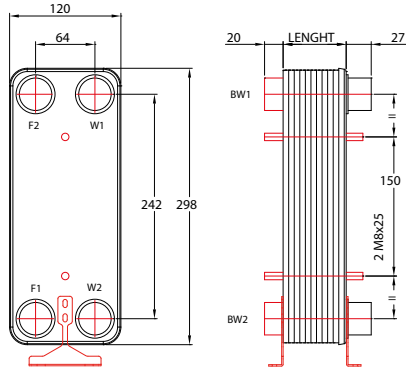
**N** Number of plates

#### LETTER TO IDENTIFY CONNECTIONS TYPE

- S** Soldering Connections
- C** Conical Male Gas Threaded Connections
- G** Cylindric Male Gas Threaded Connections
- F** Female Gas Threaded Connections
- R** Rotalock Connections Male

PLATE HEAT EXCHANGER MATERIAL Stainless Steel 316L Thickness 0.35 mm

BRAZING MATERIAL Copper (Cu)



F1 INLET Refrigerant W1-BW1 INLET Secondary Fluid  
 F2 OUTLET Refrigerant W2-BW2 OUTLET Secondary Fluid

SPECIFICATIONS	S12	S12H
PRESSURE RANGE (bar)	Vacuum to 30	Vacuum to 45
TEMPERATURE RANGE (°C)	-100°C to +120°C	-100°C to +80°C
MAXIMUM CONNECTIONS AVAILABLE (mm)	30,1	30,1
MAXIMUM FLOW RATE (m3/h)	14,07	14,07
VOLUME / CHANNEL (liters)	0.072	0,072
DIMENSIONS (mm)	120 x 298	120 x 298
LENGHT CALCULATION (mm)	$N \times 2,45 + 8$	$N \times 2,45 + 12$
WEIGHT CALCULATION (kg)	$N \times 0.112 + 1,7$	$N \times 0.112 + 4$

CONNECTIONS TYPE				
Soldering	Threaded M	Threaded F	Grooved	Rotalock
S8	C22	F22	V32	R19
S12	IC22	F27	BV32	R25
IS13	C27	F32	V40	R32
S14	IC27	F42	BV40	R44
S16	C32	IF22		
S18	IC32	IF27		
S22	C42	IF32		
S28	IC42			
IS29	G22			
S30	G27			
	G32			
	G42			
Standard Connections:				
F1 S22	F2 S28	W1-W2	C32	

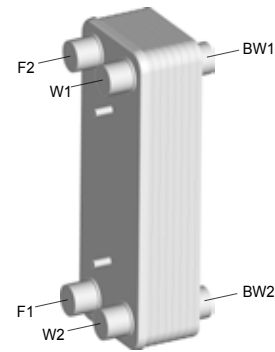
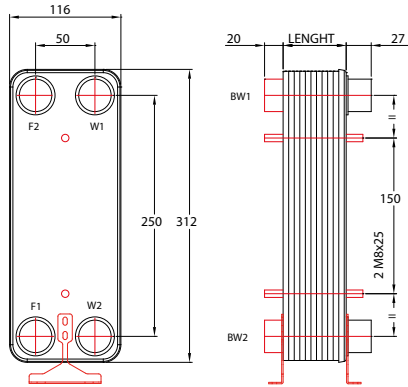
**N** Number of plates

#### LETTER TO IDENTIFY CONNECTIONS TYPE

**S** Soldering Connections  
**C** Conical Male Gas Threaded Connections  
**G** Cylindric Male Gas Threaded Connections  
**F** Female Gas Threaded Connections  
**V-BV** Grooved System for Standard Flexible Coupling  
**R** Rotalock Connections Male

PLATE HEAT EXCHANGER MATERIAL Stainless Steel 316L Thickness 0.35 mm  
 BRAZING MATERIAL Copper (Cu)





F1 INLET Refrigerant W1-BW1 INLET Secondary Fluid  
F2 OUTLET Refrigerant W2-BW2 OUTLET Secondary Fluid

SPECIFICATIONS	S16	S16H
PRESSURE RANGE (bar)	Vacuum to 30	Vacuum to 45
TEMPERATURE RANGE (°C)	-100°C to +120°C	-100°C to +80°C
MAXIMUM CONNECTIONS AVAILABLE (mm)	34	34
MAXIMUM FLOW RATE (m <sup>3</sup> /h)	14,07	14,07
VOLUME / CHANNEL (liters)	0.07	0,07
DIMENSIONS (mm)	312 X 116	312 X 116
LENGHT CALCULATION (mm)	$N \times 2,45 + 8$	$N \times 2,45 + 12$
WEIGHT CALCULATION (kg)	$N \times 0.11 + 1,7$	$N \times 0.11 + 4$

CONNECTIONS TYPE				
Soldering	Threaded M	Threaded F	Grooved	Rotalock
S8	C22	F22	V32	R19
S12	IC22	F27	BV32	R25
IS13	C27	F32	V40	R32
S14	IC27	F42	BV40	R44
S16	C32	IF22		
S18	IC32	IF27		
S22	C42	IF32		
S28	IC42			
IS29	G22			
S30	G27			
	G32			
	G42			
Standard Connections:				
F1 S22	F2 S28	W1-W2	C32	

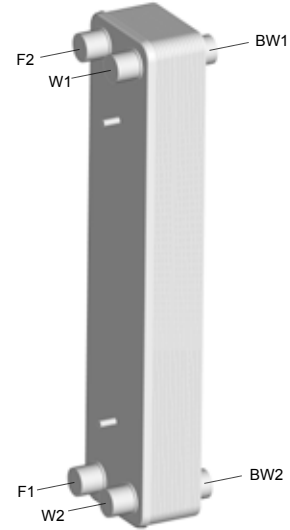
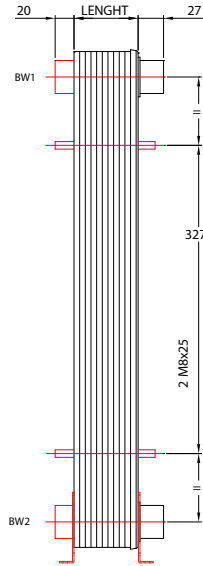
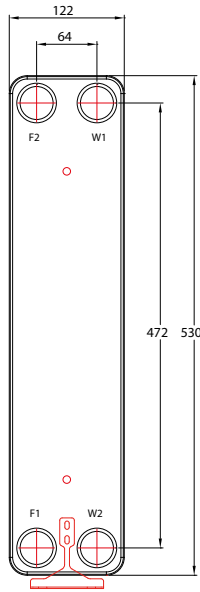
**N** Number of plates

#### LETTER TO IDENTIFY CONNECTIONS TYPE

- S** Soldering Connections
- C** Conical Male Gas Threaded Connections
- G** Cylindric Male Gas Threaded Connections
- F** Female Gas Threaded Connections
- V-BV** Grooved System for Standard Flexible Coupling
- R** Rotalock Connections Male

PLATE HEAT EXCHANGER MATERIAL Stainless Steel 316L Thickness 0.3 mm  
BRAZING MATERIAL Copper (Cu)

# S82 - S82M SINGLE CIRCUIT



F1 INLET Refrigerant    W1-BW1 INLET Secondary Fluid  
 F2 OUTLET Refrigerant    W2-BW2 OUTLET Secondary Fluid

SPECIFICATIONS	S82	S82H
PRESSURE RANGE (bar)	Vacuum to 30	Vacuum to 45
TEMPERATURE RANGE (°C)	-100°C to +120°C	-100°C to +120°C
MAXIMUM CONNECTIONS AVAILABLE (mm)	38,9	38,9
MAXIMUM FLOW RATE (m3/h)	23,6	23,6
VOLUME / CHANNEL (liters)	0,113	0,113
DIMENSIONS (mm)	122 x 530	122 x 530
LENGHT CALCULATION (mm)	$N \times 2,25 + 8$	$N \times 2,25 + 12$
WEIGHT CALCULATION (kg)	$N \times 0.206 + 2,5$	$N \times 0.206 + 6,5$

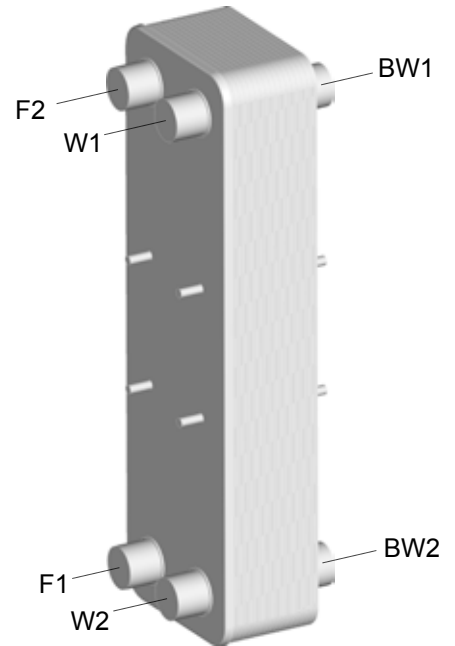
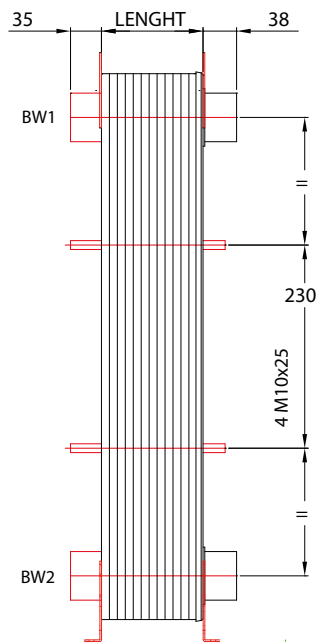
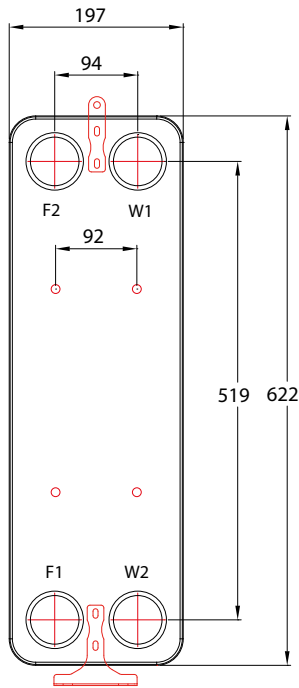
CONNECTIONS TYPE				
Soldering	Threaded M	Threaded F	Grooved	Rotalock
S8	C22	F22	V32	R19
S12	IC22	F27	BV32	R25
IS13	C27	F32	V40	R32
S14	IC27	F42	BV40	R44
S16	C32	IF22		
S18	IC32	IF27		
S22	C42	IF32		
S28	IC42			
IS29	G22			
S30	G27			
	G3			
	G42			
Standard Connections:				
F1 S22		F2 S30		W1-W2 C42

**N** Number of plates

#### LETTER TO IDENTIFY CONNECTIONS TYPE

- S** Soldering Connections
- C** Conical Male Gas Threaded Connections
- G** Cylindric Male Gas Threaded Connections
- F** Female Gas Threaded Connections
- V-BV** Grooved System for Standard Flexible Coupling
- R** Rotalock Connections Male

PLATE HEAT EXCHANGER MATERIAL    Stainless Steel 316L Thickness 0.35 mm  
 BRAZING MATERIAL    Copper (Cu)



F1 INLET Refrigerant    W1-BW1 INLET Secondary Fluid  
 F2 OUTLET Refrigerant    W2-BW2 OUTLET Secondary Fluid

SPECIFICATIONS	S182	S182H
PRESSURE RANGE (bar)	Vacuum to 30	Vacuum to 45
TEMPERATURE RANGE (°C)	-100°C to +120°C	-100°C to +120°C
MAXIMUM CONNECTIONS AVAILABLE (mm)	57	57
MAXIMUM FLOW RATE (m3/h)	50	50
VOLUME / CHANNEL (liters)	0,24	0,24
DIMENSIONS (mm)	197 x 622	197 x 622
LENGHT CALCULATION (mm)	$N \times 2,45 + 8$	$N \times 2,45 + 8$
WEIGHT CALCULATION (kg)	$N \times 0,385 + 11$	$N \times 0,385 + 11$
SAME "H" DESIGN		

CONNECTIONS TYPE				
Soldering	Threaded M	Threaded F	Grooved	Rotalock
S22	C48	F22	V50	R32
S28	IC48	F48	V65	R44
IS29	C60	F60	V72	R58
S35	IC60	IF22		
IS41	G48	IF27		
S42	G60	IF32		
S54	G70			
S60				
Standard Connections:				
F1 S35	F2 S54	W1-W2 C60		

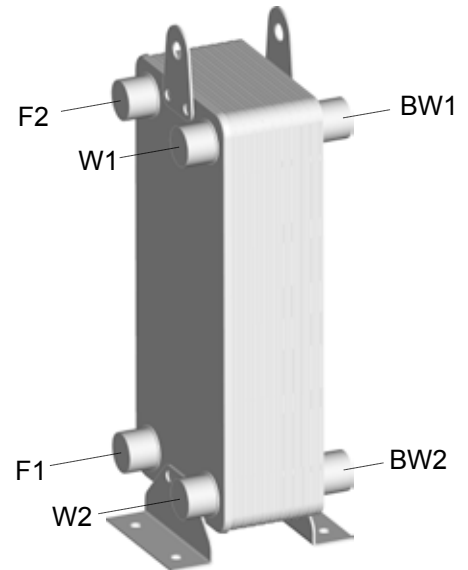
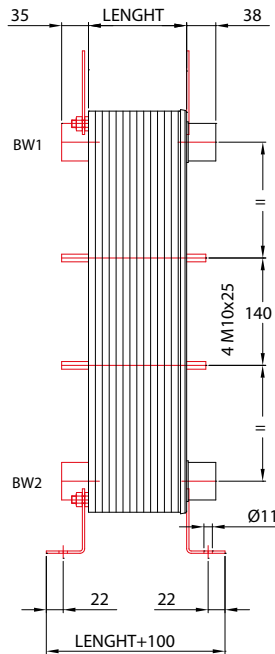
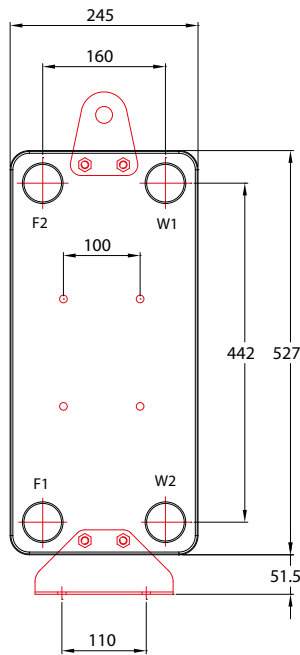
**N** Number of plates

**LETTER TO IDENTIFY CONNECTIONS TYPE**

- S** Soldering Connections
- C** Conical Male Gas Threaded Connections
- G** Cylindric Male Gas Threaded Connections
- F** Female Gas Threaded Connections
- V-BV** Grooved System for Standard Flexible Coupling
- R** Rotalock Connections Male

PLATE HEAT EXCHANGER MATERIAL    Stainless Steel 316L Thickness 0.35 mm  
 BRAZING MATERIAL    Copper (Cu)

# S202 SINGLE CIRCUIT



F1 INLET Refrigerant    W1-BW1 INLET Secondary Fluid  
 F2 OUTLET Refrigerant    W2-BW2 OUTLET Secondary Fluid

SPECIFICATIONS	S202	S202H	CONNECTIONS TYPE				
			Soldering	Threaded M	Threaded F	Grooved	Rotalock
PRESSURE RANGE (bar)	Vacuum to 30	Vacuum to 45	S22	C48	F22	V50	R32
TEMPERATURE RANGE (°C)	-100°C to +120°C	-100°C to +120°C	S28	IC48	F27	V65	R44
MAXIMUM CONNECTIONS AVAILABLE (mm)	57	57	IS29	C60	F48	V72	R58
MAXIMUM FLOW RATE (m3/h)	50,62	50,62	S35	IC60	F60		
VOLUME / CHANNEL (liters)	0,254	0,254	IS41	G48	IF22		
DIMENSIONS (mm)	245 x 527	245 x 527	S42	G60	IF27		
LENGHT CALCULATION (mm)	$N \times 2,45 + 4$	$N \times 2,45 + 8$	S54	G70	IF32		
WEIGHT CALCULATION (kg)	$N \times 0.406 + 9,2$	$N \times 0.406 + 18$	S60				
			Standard Connections: F1 S35    F2 S54    W1-W2 C60				

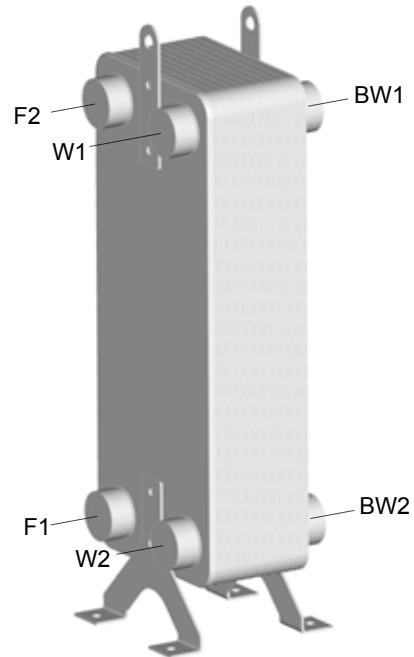
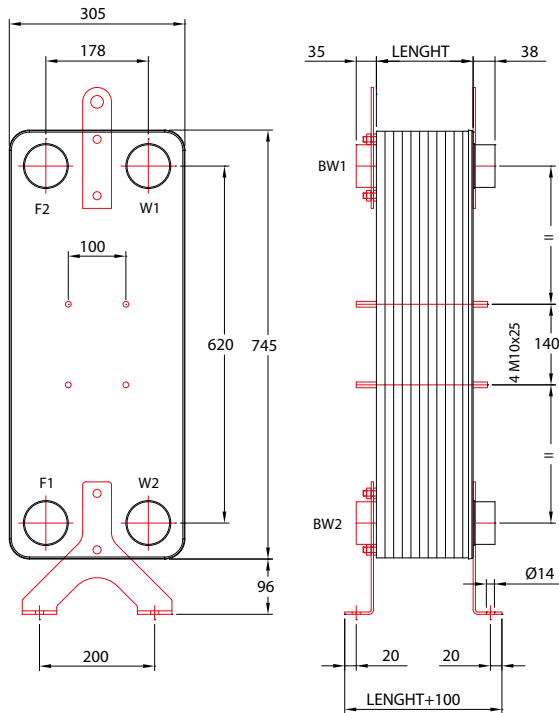
**N**      Number of plates

**LETTER TO IDENTIFY CONNECTIONS TYPE**

- S**      Soldering Connections
- C**      Conical Male Gas Threaded Connections
- G**      Cylindric Male Gas Threaded Connections
- F**      Female Gas Threaded Connections
- V-BV**   Grooved System for Standard Flexible Coupling
- R**      Rotalock Connections Male

PLATE HEAT EXCHANGER MATERIAL    Stainless Steel 316L Thickness 0.35 mm  
 BRAZING MATERIAL                      Copper (Cu)

# S404 SINGLE CIRCUIT



F1 INLET Refrigerant    W1-BW1 INLET Secondary Fluid  
 F2 OUTLET Refrigerant    W2-BW2 OUTLET Secondary Fluid

SPECIFICATIONS	S404
PRESSURE RANGE (bar)	Vacuum to 30
TEMPERATURE RANGE (°C)	-100°C to +120°C
MAXIMUM CONNECTIONS AVAILABLE (mm)	84,7
MAXIMUM FLOW RATE (m3/h)	111,68
VOLUME / CHANNEL (liters)	0,56
DIMENSIONS (mm)	305 x 745
LENGHT CALCULATION (mm)	$N \times 2,95 + 8$
WEIGHT CALCULATION (kg)	$N \times 0,720 + 30$

CONNECTIONS TYPE					
Soldering	Threaded M	Threaded F	Grooved	Rotalock	Flanges
S54	C76	F22	V73	R58	NF80
S64	IC73	F27	V80		
IS65	C90	IF22	V90		
S76	IC90	IF27			
IS80	G76	IF32			
S90	G90				
IS92					
Standard Connections:					
F1 S54		F2 S76		W1-W2 G90	

**N** Number of plates

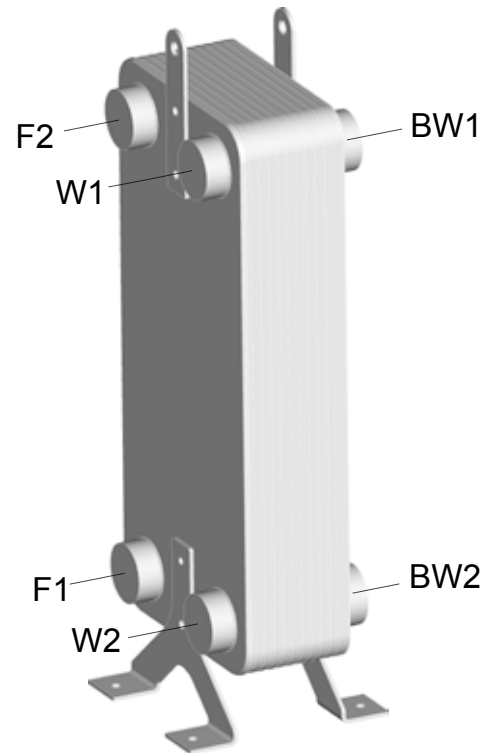
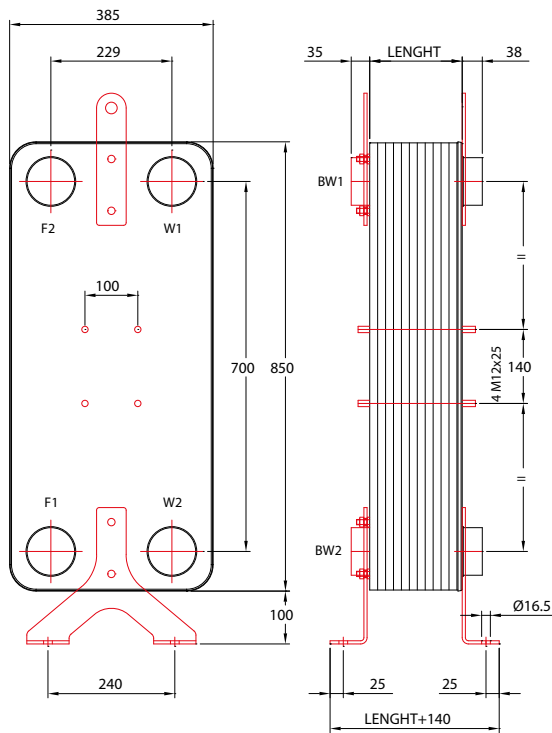
**LETTER TO IDENTIFY CONNECTIONS TYPE**

- S** Soldering Connections
- C** Conical Male Gas Threaded Connections
- G** Cylindric Male Gas Threaded Connections
- F** Female Gas Threaded Connections
- V-BV** Grooved System for Standard Flexible Coupling
- R** Rotalock Connections Male

PLATE HEAT EXCHANGER MATERIAL    Stainless Steel 316L Thickness 0.35 mm  
 BRAZING MATERIAL    Copper (Cu)

# S606 - S606M

SINGLE CIRCUIT



F1 INLET Refrigerant W1-BW1 INLET Secondary Fluid  
 F2 OUTLET Refrigerant W2-BW2 OUTLET Secondary Fluid

SPECIFICATIONS	S606
PRESSURE RANGE (bar)	Vacuum to 20
TEMPERATURE RANGE (°C)	-100°C to +120°C
MAXIMUM CONNECTIONS AVAILABLE (mm)	110,1
MAXIMUM FLOW RATE (m <sup>3</sup> /h)	188,41
VOLUME / CHANNEL (liters)	0,79
DIMENSIONS (mm)	385 x 850
LENGHT CALCULATION (mm)	$N \times 2,95 + 8$
WEIGHT CALCULATION (kg)	$N \times 1 + 35$

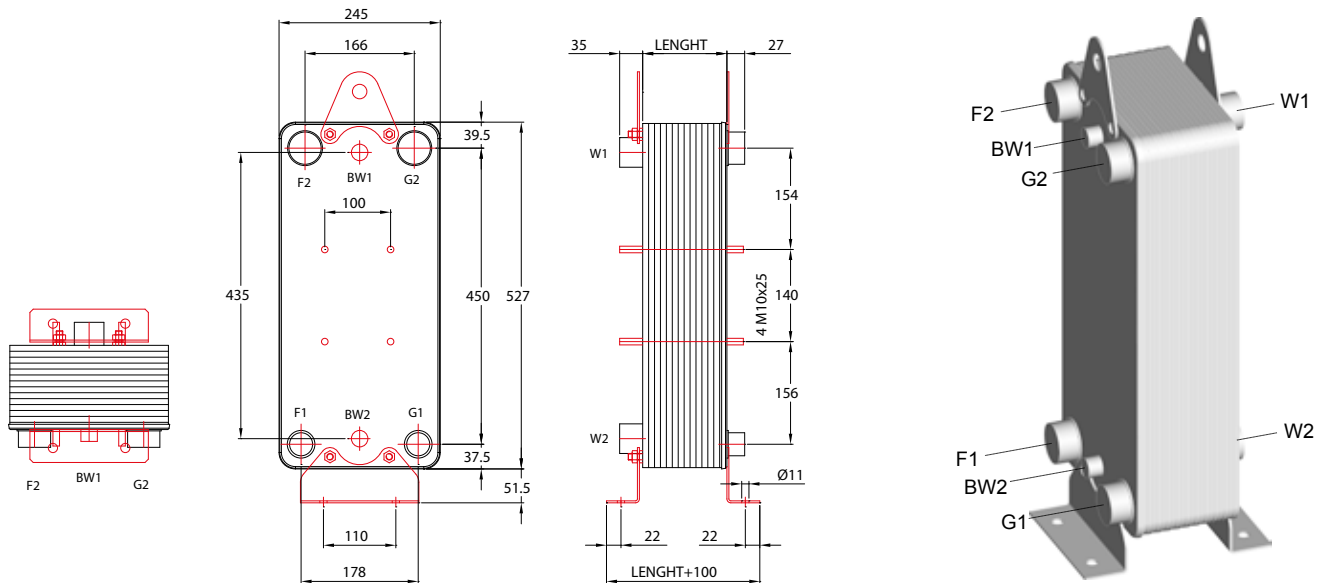
CONNECTIONS TYPE				
Soldering	Threaded M	Threaded F	Grooved	Flanges
S54	C76	F22	V73	NF100
S64	IC73	F27	V80	NF80
IS65	C90	IF22	V90	
S76	IC90	IF27	V100	
IS80	C100	IF32		
S90	IC100			
IS92	G76			
S100	G90			
	G100			
Standard Connections:				
F1 S76	F2 S100	W1-W2 V100		

**N** Number of plates

**LETTER TO IDENTIFY CONNECTIONS TYPE**

- S** Soldering Connections
- C** Conical Male Gas Threaded Connections
- G** Cylindric Male Gas Threaded Connections
- F** Female Gas Threaded Connections
- V-BV** Grooved System for Standard Flexible Coupling
- R** Rotalock Connections Male

PLATE HEAT EXCHANGER MATERIAL Stainless Steel 316L Thickness 0.35 mm  
 BRAZING MATERIAL Copper (Cu)



**F1 INLET** Refrigerant Circuit 1      **F2 OUTLET** Refrigerant Circuit 1  
**G1 INLET** Refrigerant Circuit 2      **G2 OUTLET** Refrigerant Circuit 2  
**W1 INLET** Secondary Fluid              **W2 OUTLET** Secondary Fluid  
**BW1 - BW2** Connections for Sensor

SPECIFICATIONS	S222	S222H	CONNECTIONS TYPE				
PRESSURE RANGE (bar)	Vacuum to 30	Vacuum to 45	Soldering	Threaded M	Threaded F	Grooved	Rotalock
TEMPERATURE RANGE (°C)	-100°C to +120°C	-100°C to +120°C	S22	C48	F22	V50	R32
MAXIMUM CONNECTIONS AVAILABLE (mm)	57	57	S28	IC48	F27	V65	R44
MAXIMUM FLOW RATE (m3/h)	50,62	50,62	IS29	C60	IF22	V72	R58
VOLUME / CHANNEL (liters)	0,223	0,223	S30	IC60	IF27		
DIMENSIONS (mm)	245 x 527	245 x 527	S42	G48			
LENGHT CALCULATION (mm)	$N \times 2,45 + 4$	$N \times 2,45 + 8$	IS41	G60			
WEIGHT CALCULATION (kg)	$N \times 0.406 + 9,2$	$N \times 0.406 + 18$	S50				
			Standard Connections				
			F1-G1 S28    F2-G2 S42    W1-W2 G60 BW1-BW2 F22				

**N** Number of plates

**LETTER TO IDENTIFY CONNECTIONS TYPE**

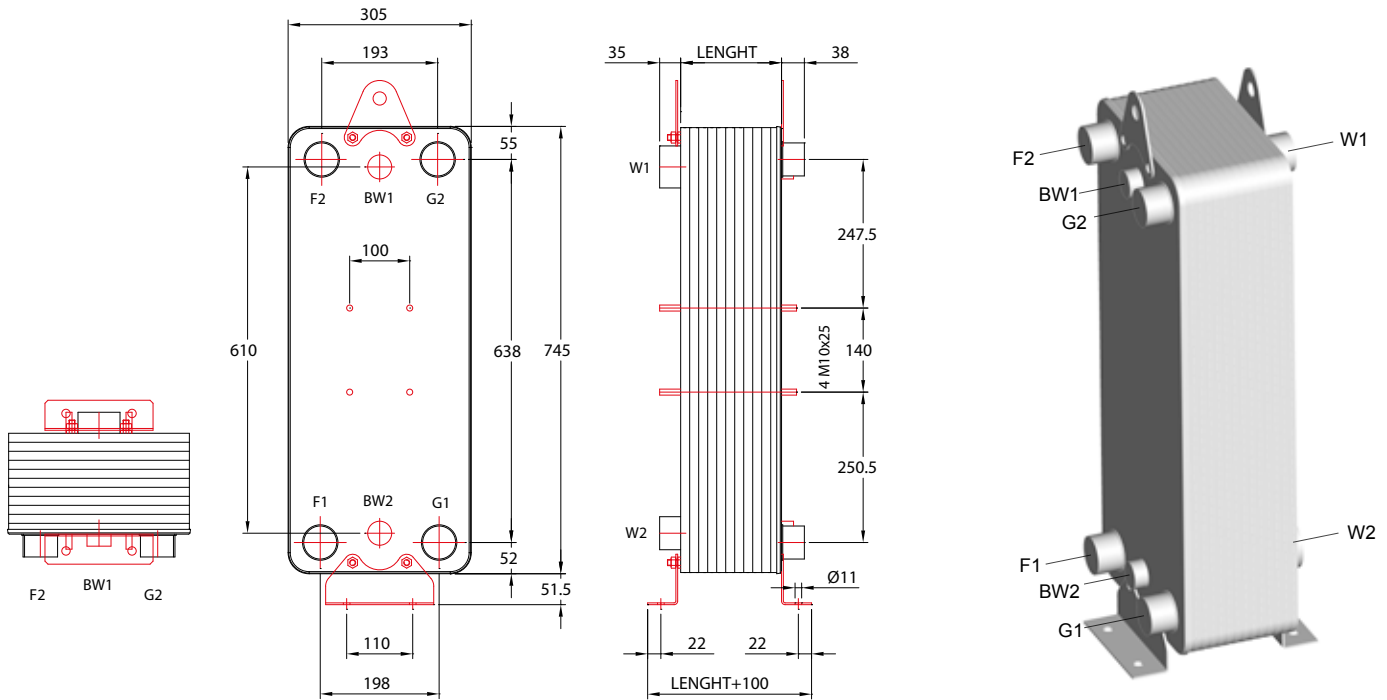
- S** Soldering Connections
- C** Conical Male Gas Threaded Connections
- G** Cylindric Male Gas Threaded Connections
- F** Female Gas Threaded Connections
- V - BV** Grooved System for Standard Flexible Coupling
- R** Rotalock Connections Male

PLATE HEAT EXCHANGER MATERIAL    Stainless Steel 316L Thickness 0.35 mm

BRAZING MATERIAL    Copper (Cu)

Criss-Cross Flow Pattern Available on Request

# S424 DUAL CIRCUIT



**F1 INLET** Refrigerant Circuit 1      **F2 OUTLET** Refrigerant Circuit 1  
**G1 INLET** Refrigerant Circuit 2      **G2 OUTLET** Refrigerant Circuit 2  
**W1 INLET** Secondary Fluid            **W2 OUTLET** Secondary Fluid  
**BW1 - BW2** Connections for Sensor

SPECIFICATIONS	S424	S424H	CONNECTIONS TYPE							
			Soldering	Threaded M	Threaded F	Grooved	Rotalock	Flanges		
PRESSURE RANGE (bar)	Vacuum to 30	Vacuum to 45								
TEMPERATURE RANGE (°C)	-100°C to +120°C	-100°C to +120°C	S30	C76	F22	V73	R44	NF80		
MAXIMUM CONNECTIONS AVAILABLE (mm)	84,7	84,7	S42	IC73	F27	V80	R58	NF65		
MAXIMUM FLOW RATE (m3/h)	111,68	111,68	S54	C90	IF22	V90				
VOLUME / CHANNEL (liters)	0,484	0,484	S64	IC90	IF27					
DIMENSIONS (mm)	305 x 745	305 x 745	IS65	G76						
LENGHT CALCULATION (mm)	$N \times 2,95 + 8$	$N \times 2,95 + 12$	S76	G90						
WEIGHT CALCULATION (kg)	$N \times 0,720 + 30$	$N \times 0,720 + 45$	IS80							
			S90							
			Standard Connections: F1-G1 S54    F2-G2 S76    W1-W2 C90 BW1-BW2 F22							

**N** Number of plates

**LETTER TO IDENTIFY CONNECTIONS TYPE**

- S** Soldering Connections
- C** Conical Male Gas Threaded Connections
- G** Cylindric Male Gas Threaded Connections
- F** Female Gas Threaded Connections
- V - BV** Grooved System for Standard Flexible Coupling
- R** Rotalock Connections Male

PLATE HEAT EXCHANGER MATERIAL    Stainless Steel 316L Thickness 0.35 mm

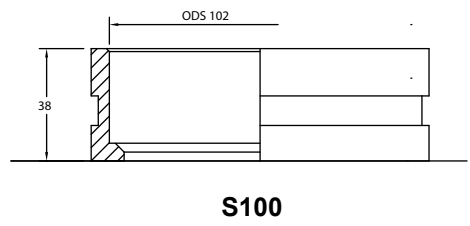
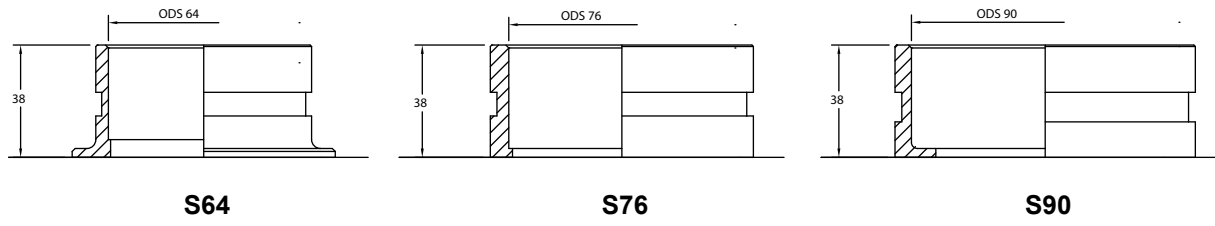
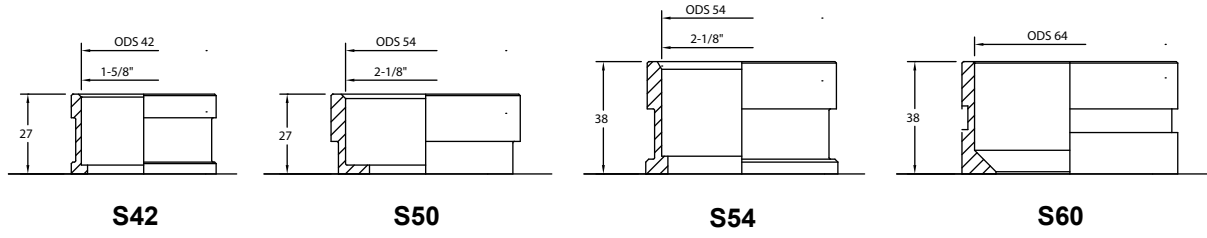
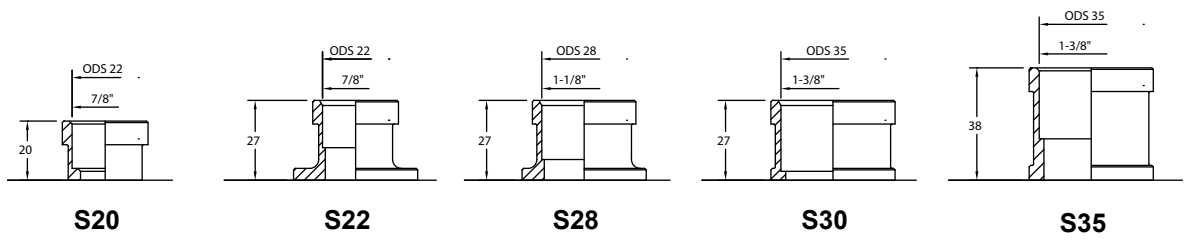
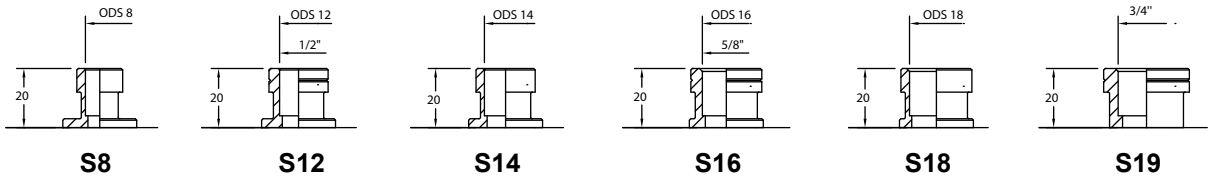
BRAZING MATERIAL    Copper (Cu)

Criss-Cross Flow Pattern Available on Request



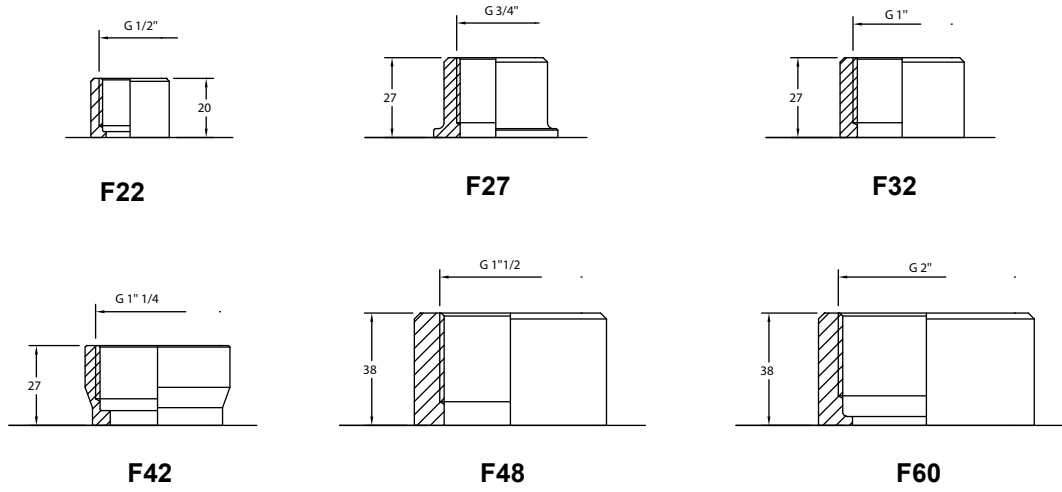
# Metric Connections

## S Soldering connections

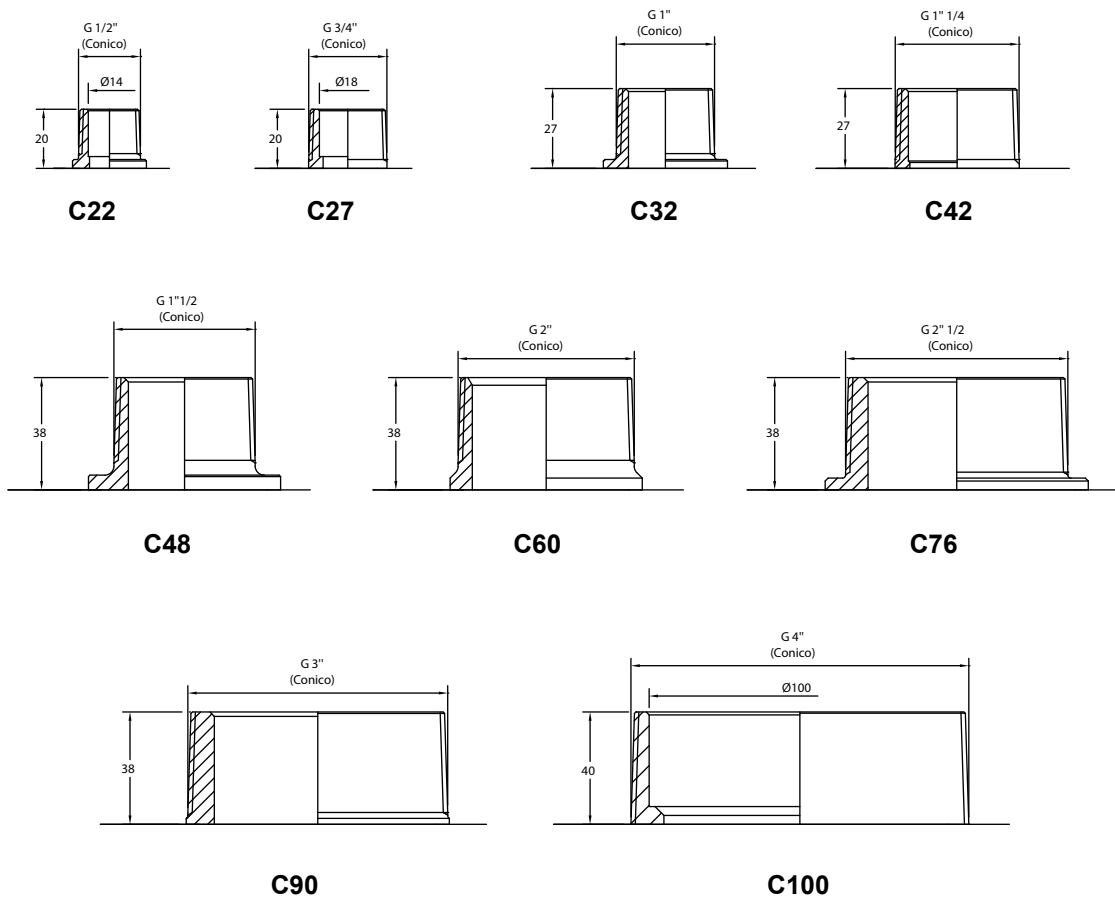


# Metric Connections

## F Gas thread connections female

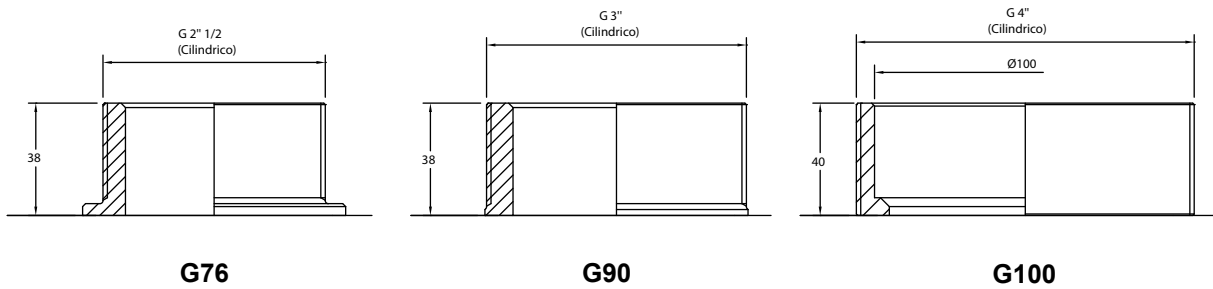
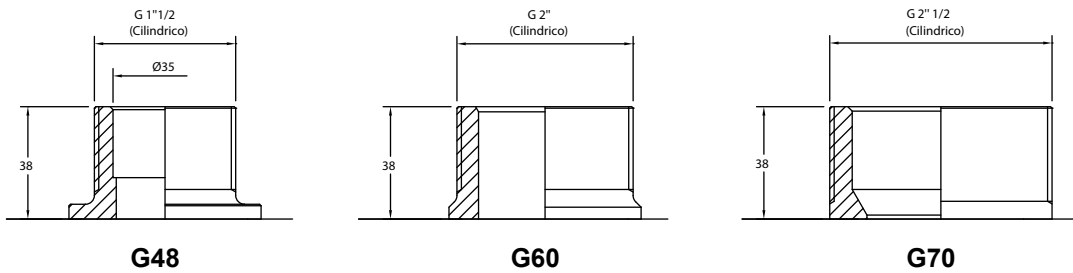
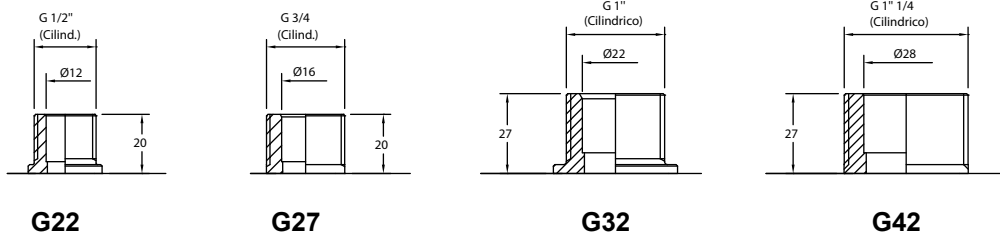


## C Gas thread connections Male conical

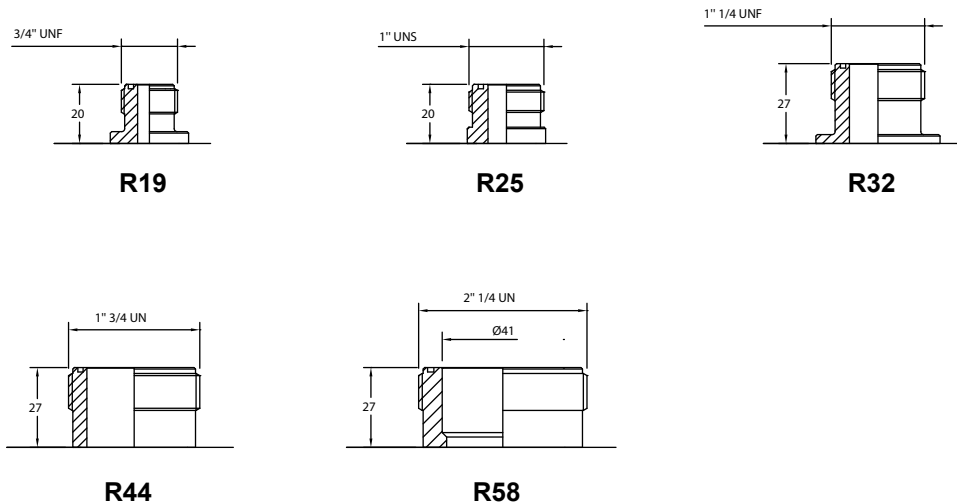


# Metric Connections

## G Gas thread connections male cylindrical

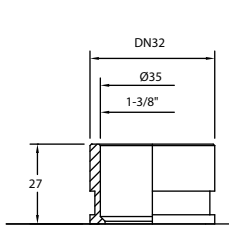


## R Rotalock connections Male

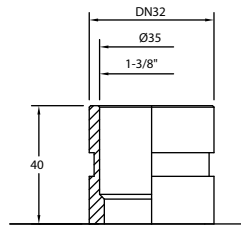


# Metric Connections

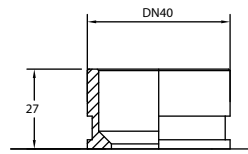
## V-BV Growed fittings



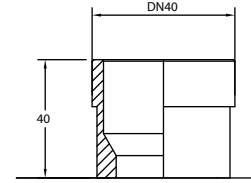
**V32**



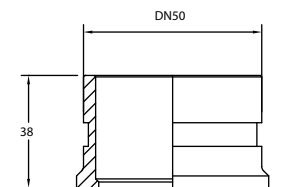
**BV32**



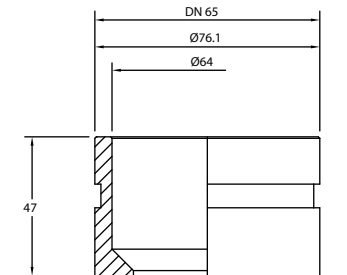
**V40**



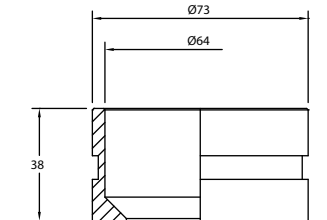
**BV40**



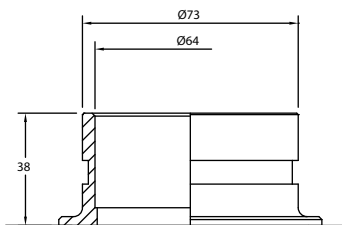
**V50**



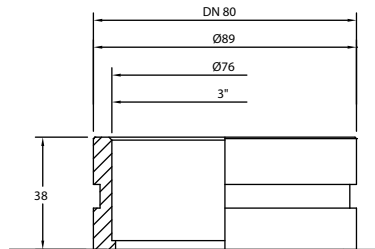
**V65**



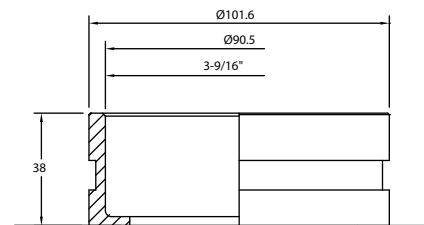
**V72**



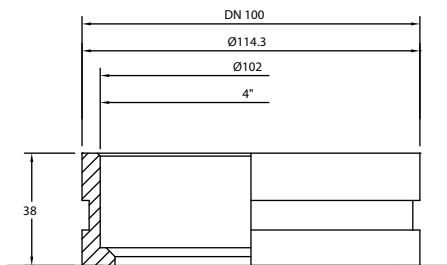
**V73**



**V80**



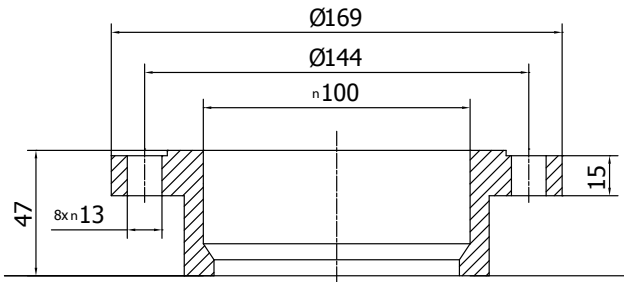
**V90**



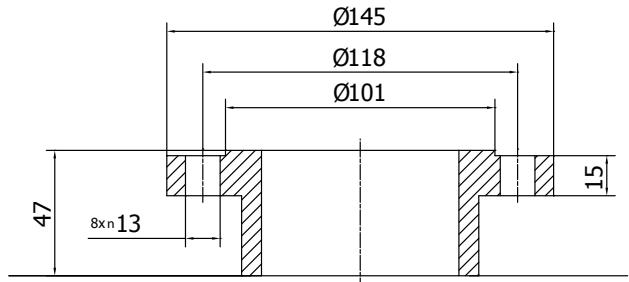
**V100**

# Metric Connections

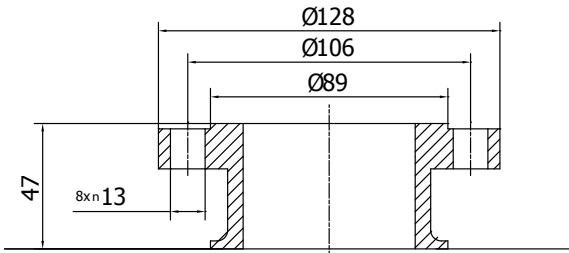
## CF Compact Flange



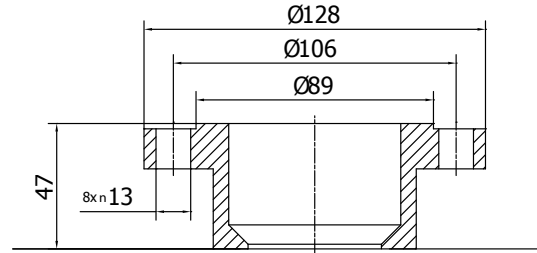
**CF100**



**CF80**

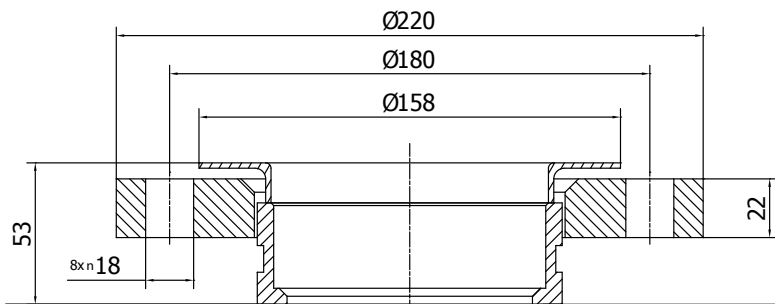


**CF65**

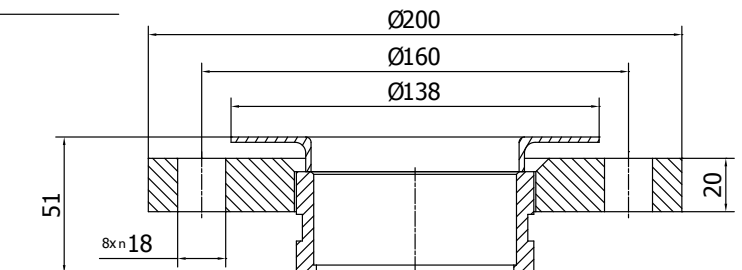


**CF66**

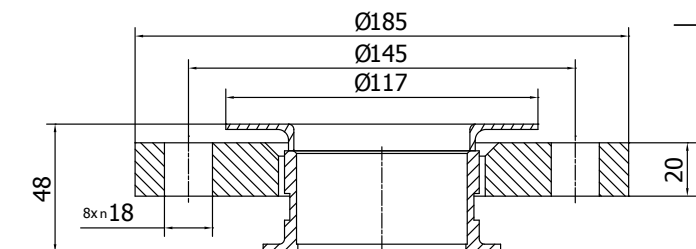
## NF DIN Flange



**NF100**



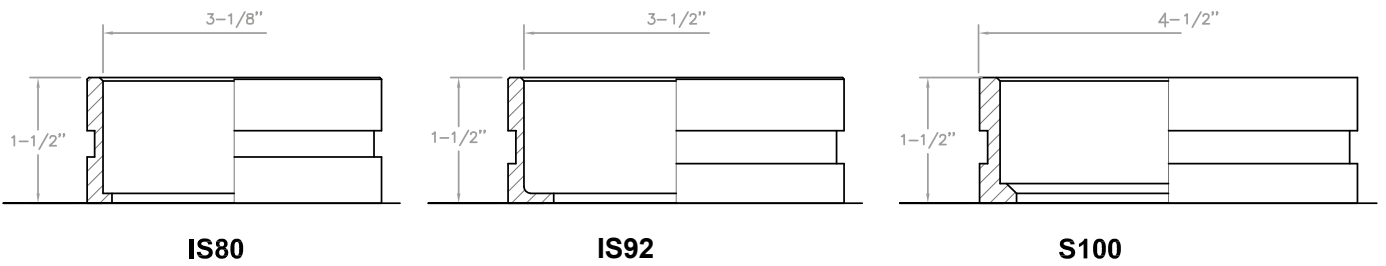
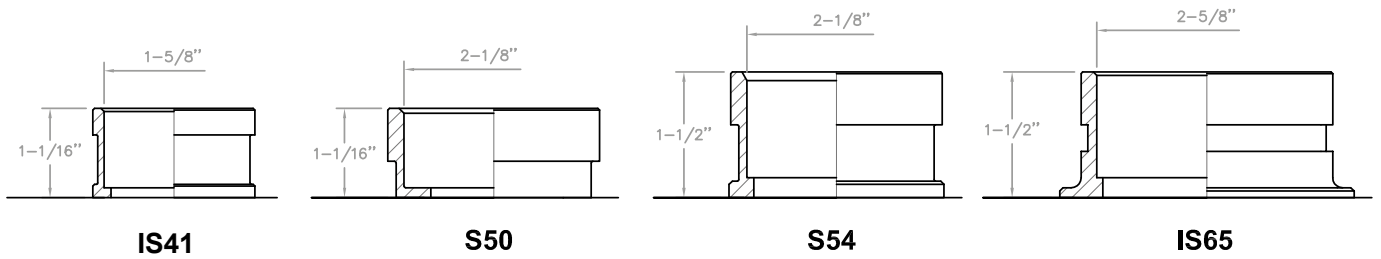
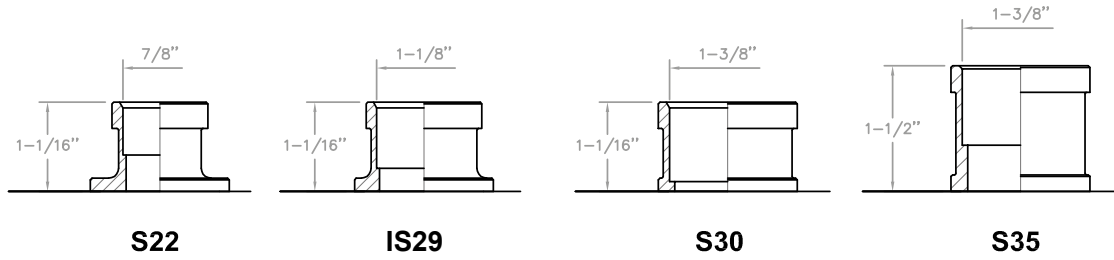
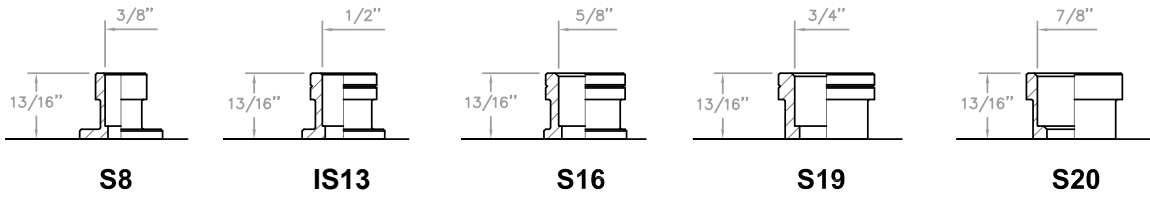
**NF80**



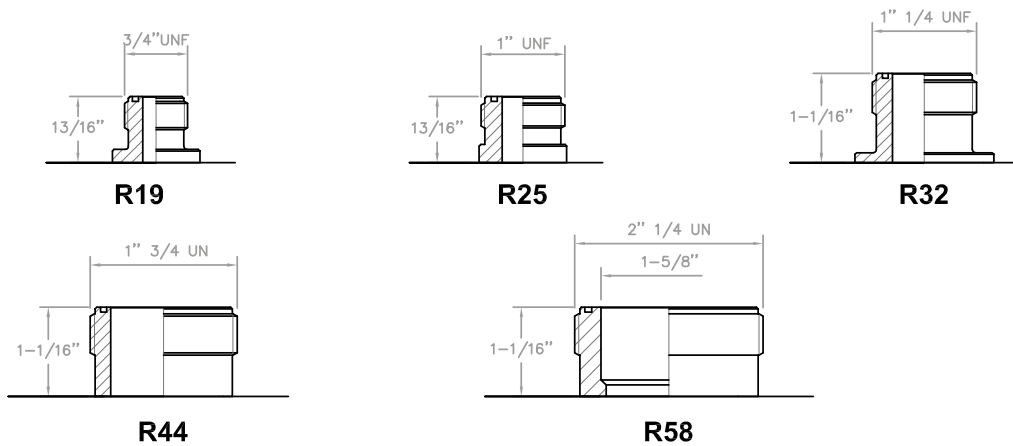
**NF65**

# Inches Connections

## S-IS Soldering connections

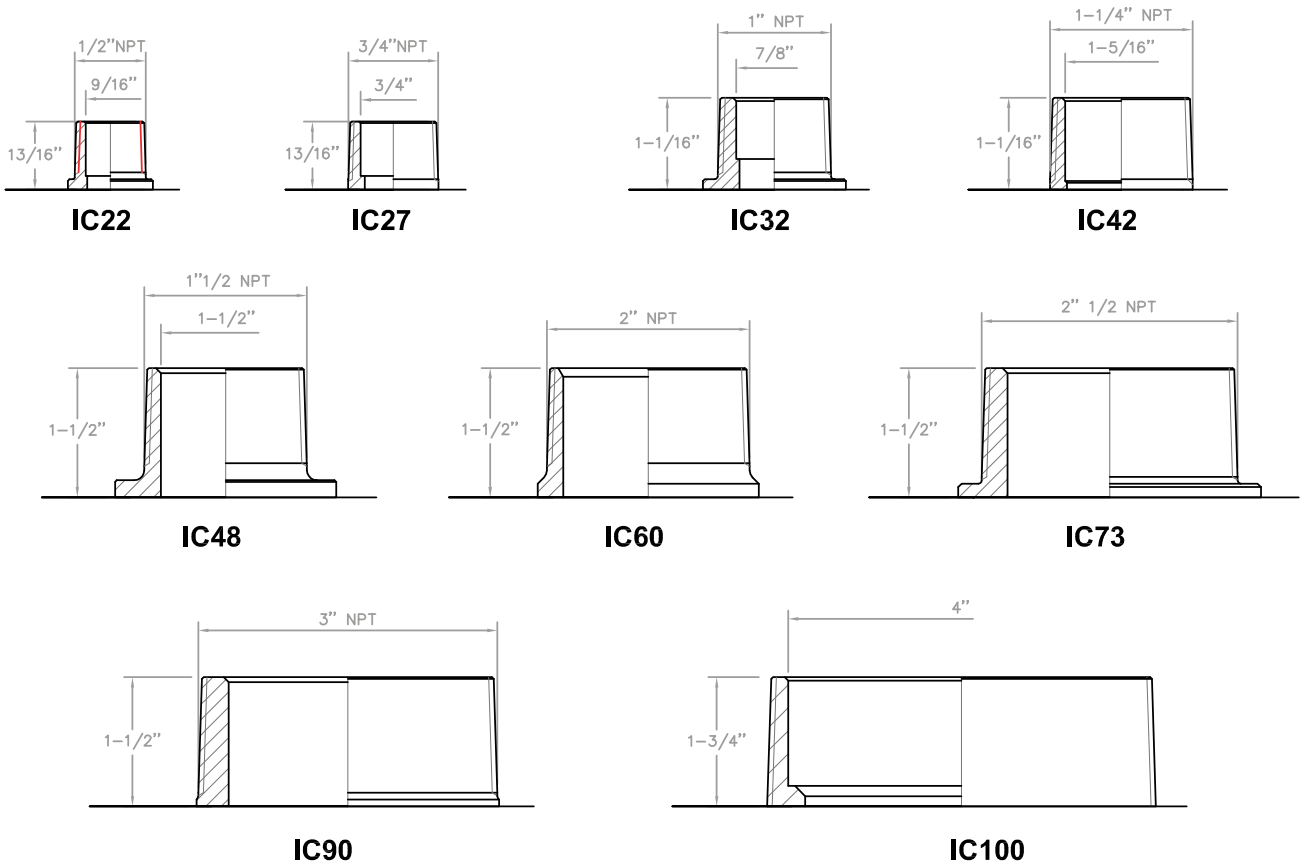


## R Rotolock connections Male

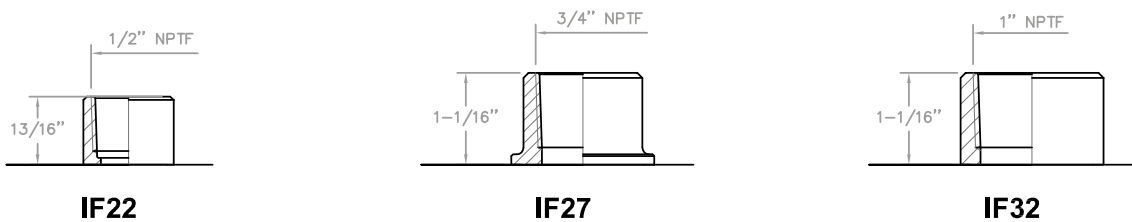


# Inches Connections

## IC NPT Threaded connections Male

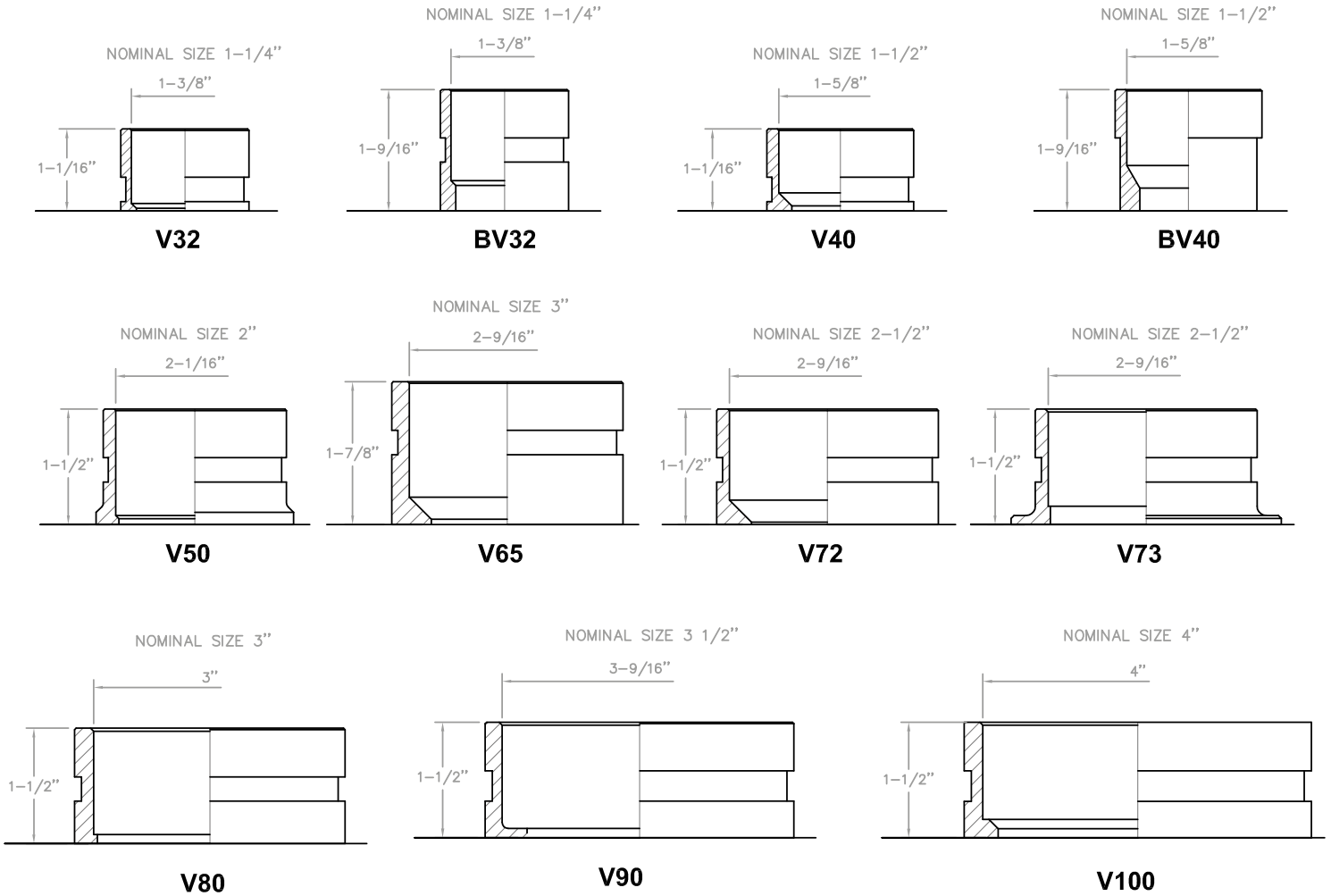


## IF NPT Threaded connections Female

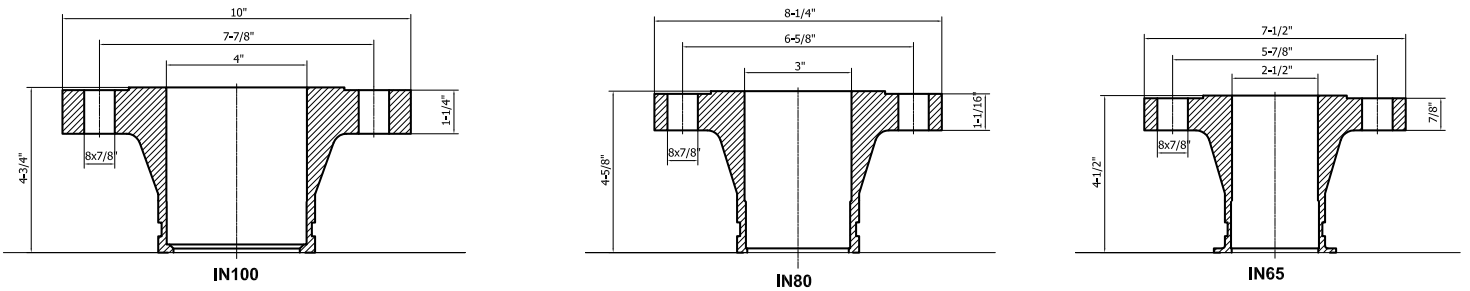


# Inches Connections

## V-BV Grooved fittings



## IN ANSI Lap Joint flanges 300 lb/sq.in.

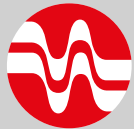












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