

Crosses

Model	Size	Working pressure	Overall dimensions(mm)		Connection type	Environment
			A	B		
SWG46-42-2	2"	42/6000 (Mpa/Psi)	308	308	FIG602(F × M × M × M)	std.
					FIG602(F × F × M × M)	std.
					FIG602(M × F × F × F)	std.
					FIG602(F × M × F × M)	std.
					FIG602(M × M × M × M)	std.
SWG46-42-3	3"		428	428	FIG602(F × F × F × F)	std.
					FIG602(F × M × M × M)	std.
					FIG602(F × F × M × M)	std.
					FIG602(M × F × F × F)	std.
					FIG602(F × M × F × M)	std.
SWG46-42-4	4"		428	428	FIG602(F × M × M × M)	std.
					FIG602(F × F × M × M)	std.
					FIG602(M × F × F × F)	std.
					FIG602(F × M × F × M)	std.
					FIG602(M × M × M × M)	std.
SWG46-70-2	2"	70/10000 (Mpa/Psi)	308	308	FIG1002(F × M × M × M)	std.
					FIG1002(F × F × M × M)	std.
					FIG1002(M × F × F × F)	std.
					FIG1002(F × M × F × M)	std.
					FIG1002(M × M × M × M)	std.
SWG46-70-3	3"		428	428	FIG1002(F × M × M × M)	std.
					FIG1002(F × F × M × M)	std.
					FIG1002(M × F × F × F)	std.
					FIG1002(F × M × F × M)	std.
					FIG1002(M × M × M × M)	std.
SWG46-70-4	4"		428	428	FIG1002(F × F × M × M)	std.
					FIG1002(M × F × F × F)	std.
					FIG1002(F × M × F × M)	std.
					FIG1502(F × M × M × M)	std.
					FIG1502(F × F × M × M)	std.
SWG46-105-2	2"	105/15000 (Mpa/Psi)	308	308	FIG1502(M × F × F × F)	std.
					FIG1502(F × M × F × M)	std.
					FIG1502(F × F × F × F)	std.
					FIG1502(F × M × M × M)	std.
					FIG1502(F × F × M × M)	std.
SWG46-105-3	3"		428	428	FIG1502(M × F × F × F)	std.
					FIG1502(F × M × F × M)	std.
					FIG1502(F × M × M × M)	std.
					FIG1502(F × F × M × M)	std.
					FIG1502(M × F × F × F)	std.
SWG46-105-4	4"		428	428	FIG1502(F × M × M × M)	std.
					FIG1502(F × M × F × F)	std.
					FIG1502(F × M × F × M)	std.
					FIG2002(F × M × M × M)	std.
					FIG2002(F × F × M × M)	std.
SWG46-140-2	2"	140/20000 (Mpa/Psi)	346	346	FIG2002(M × F × F × F)	std.
					FIG2002(F × M × F × M)	std.
					FIG2002(F × M × M × M)	std.
					FIG2002(F × M × M × M)	std.
					FIG2002(F × F × M × M)	std.
SWG46-140-3	3"		533	533	FIG2002(M × F × F × F)	std.
					FIG2002(F × M × F × M)	std.
					FIG2002(F × M × F × M)	std.
					FIG2002(F × M × F × M)	std.
					FIG2002(F × M × F × M)	std.

Crosses

Model	Size	Working pressure	Overall dimensions(mm)		Connection type	Environment
			A	B		
SWG46-42-2	2"	42/6000 (Mpa/Psi)	308	308	FIG602(F × M × M × M)	H ₂ S
					FIG602(F × F × M × M)	H ₂ S
					FIG602(M × F × F × F)	H ₂ S
					FIG602(F × M × F × M)	H ₂ S
					FIG602(F × M × M × M)	H ₂ S
SWG46-42-3	3"		428	428	FIG602(F × F × M × M)	H ₂ S
					FIG602(M × F × F × F)	H ₂ S
					FIG602(F × M × F × M)	H ₂ S
					FIG602(F × M × M × M)	H ₂ S
					FIG602(F × F × M × M)	H ₂ S
SWG46-42-4	4"		428	428	FIG602(M × F × F × M)	H ₂ S
					FIG602(F × M × F × M)	H ₂ S
					FIG602(F × M × M × M)	H ₂ S
					FIG602(F × F × M × M)	H ₂ S
					FIG602(M × F × F × F)	H ₂ S
SWG46-52-2	2"	52/7500 (Mpa/Psi)	308	308	FIG1002(F × M × M × M)	H ₂ S
					FIG1002(M × F × F × F)	H ₂ S
					FIG1002(F × F × F × F)	H ₂ S
					FIG1002(F × M × M × M)	H ₂ S
					FIG1002(F × M × F × M)	H ₂ S
SWG46-52-3	3"		428	428	FIG1002(F × M × F × M)	H ₂ S
					FIG1002(F × M × M × M)	H ₂ S
					FIG1002(F × F × F × F)	H ₂ S
					FIG1002(F × M × F × M)	H ₂ S
					FIG1002(F × M × M × M)	H ₂ S
SWG46-52-4	4"		428	428	FIG1002(F × M × M × M)	H ₂ S
					FIG1002(F × F × M × M)	H ₂ S
					FIG1002(F × M × F × M)	H ₂ S
					FIG1002(F × M × M × M)	H ₂ S
					FIG1002(F × F × M × M)	H ₂ S
SWG46-52-4	4"	70/10000 (Mpa/Psi)	428	428	FIG1502(F × M × M × M)	H ₂ S
					FIG1502(F × M × F × F)	H ₂ S
					FIG1502(F × M × M × M)	H ₂ S
					FIG1502(F × M × F × M)	H ₂ S
					FIG1502(F × M × M × M)	H ₂ S
SWG46-70-2	2"		308	308	FIG1502(F × F × M × M)	H ₂ S
					FIG1502(F × M × F × F)	H ₂ S
					FIG1502(M × F × F × F)	H ₂ S
					FIG1502(F × M × M × M)	H ₂ S
					FIG1502(F × M × F × M)	H ₂ S
SWG46-70-3	3"		428	428	FIG1502(F × M × M × M)	H ₂ S
					FIG1502(M × F × F × F)	H ₂ S
					FIG1502(F × M × F × M)	H ₂ S
					FIG1502(F × M × M × M)	H ₂ S
					FIG1502(F × M × F × M)	H ₂ S
SWG46-70-4	4"	428	428	FIG1502(F × M × M × M)	H ₂ S	
				FIG1502(F × M × F × F)	H ₂ S	
				FIG1502(M × F × F × F)	H ₂ S	
				FIG1502(F × M × F × M)	H ₂ S	
				FIG1502(F × M × M × M)	H ₂ S	
SWG46-105-2	2"	105/15000 (Mpa/Psi)	346	346	FIG2202(F × M × M × M)	H ₂ S
					FIG2202(F × M × F × F)	H ₂ S
					FIG2202(F × M × M × M)	H ₂ S
					FIG2202(F × M × F × M)	H ₂ S
					FIG2202(F × M × M × M)	H ₂ S
SWG46-105-3	3"		533	533	FIG2202(F × F × M × M)	H ₂ S
					FIG2202(F × M × F × M)	H ₂ S
					FIG2202(F × M × M × M)	H ₂ S
					FIG2202(F × F × M × M)	H ₂ S
					FIG2202(M × F × F × F)	H ₂ S

Note:

The customer's purchasing information shall include product name, size, working pressure, connection type (choose end connection type per relevant drawings) and product application environment.

Fishtail connector

Model	Size	Working pressure Mpa/Psi	Overall dimensions(mm)		Connection type	Environment
			A	B		
SWG47-42-2	2"	42/6000	513	305	FIG602(M×F×F×F)	std.
SWG47-42-3	3"	42/6000	533	355	FIG602(M×F×F×F)	std.
SWG47-42-4	4"	42/6000	533	355	FIG602(M×F×F×F)	std.
SWG47-70-2	2"	70/10000	513	305	FIG1002(M×F×F×F)	std.
SWG47-70-3	3"	70/10000	533	355	FIG1002(M×F×F×F)	std.
SWG47-70-4	4"	70/10000	533	355	FIG1002(M×F×F×F)	std.
SWG47-105-2	2"	105/15000	513	305	FIG1502(M×F×F×F)	std.
SWG47-105-3	3"	105/15000	533	355	FIG1502(M×F×F×F)	std.
SWG47-105-4	4"	105/15000	533	355	FIG1502(M×F×F×F)	std.
SWG47-140-2	2"	140/20000	370	185	FIG2002(M×F×F×F)	std.
SWG47-140-3	3"	140/20000	533	350	FIG2002(M×F×F×F)	std.

Note:

The customer's purchasing information shall include product name, size, working pressure, connection type (choose end connection type per relevant drawings) and product application environment.

Multidimensional laterals

Model	Size	Working pressure	Overall dimensions(mm)			Connection type	Environment
A	B	C					
SWG44-105-2L	2"	105/15000	400	250	120	FIG1502	std.
SWG44-105-3L	3"	105/15000	533	356	150	FIG1502	std.
SWG44-105-3L	3"	105/15000	533	356	150	FIG1502	std.
SWG44-105-4L	4"	105/15000	533	356	150	FIG1502	std.
SWG44-140-3L	3"	140/20000	533	350	181	FIG2002	std.
SWG44-140-3L	3"	140/20000	533	350	181	FIG2002	std.

Multidimensional crosses

Model	Size	Working pressure	Overall dimensions(mm)			Connection type	Environment
A	B	C					
SWG48-105-2L	2"	105/15000	308	308	120	FIG1502	std.
SWG48-105-3L	3"	105/15000	428	428	150	FIG1502	std.
SWG48-105-4L	4"	105/15000	428	428	150	FIG1502	std.
SWG48-140-3L	3"	140/20000	533	533	181	FIG2002	std.

Multidimensional Ys

Model	Size	Working pressure	Overall dimensions(mm)			Connection type	Environment
A	B	C					
SWG45-105-2L	2"	105/15000	133	127	120	FIG1502	std.
SWG45-105-3L	3"	105/15000	197	190	150	FIG1502	std.
SWG45-105-4L	4"	105/15000	197	190	150	FIG1502	std.
SWG45-140-3L	3"	140/20000	270	270	181	FIG2002	std.

Note:

The customer's purchasing information shall include product name, size, working pressure, connection type (choose end connection type per relevant drawings) and product application environment.

INTEGRAL FITTINGS

■ Various models of integral connectors for normal temperature, low temperature and sour gas (H₂S) conditions can be provided.

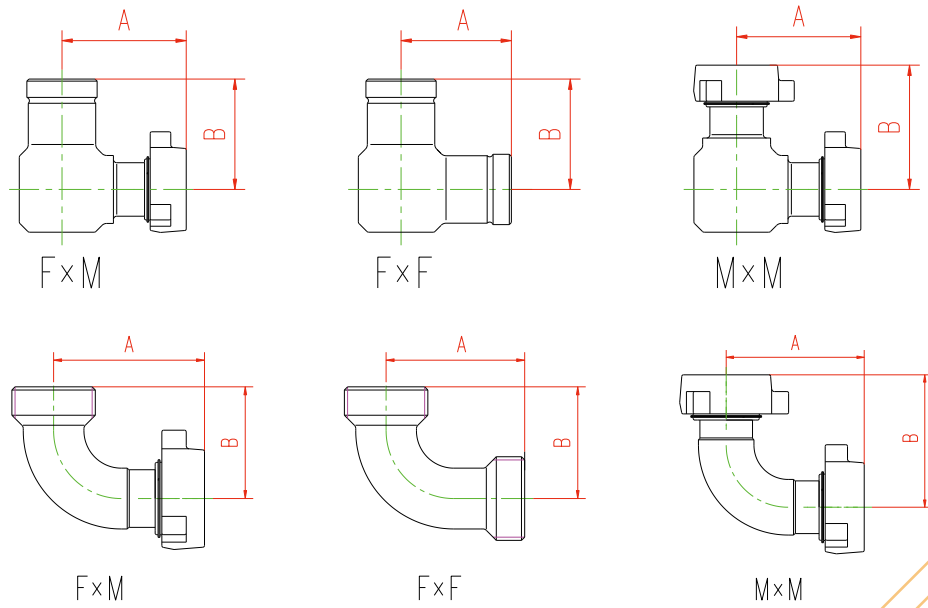
■ The integral connectors for sour gas (H₂S) environment are made to NACE MR0175; Some reinforcements have been done in the area where flow changes its direction and erosion happens to prolong the operation life.

■ Model: 90°Ells, 90° elbow', Tees, Ys, Laterals, Crosses, Fishtail connectors, multidimensional Laterals, multidimensional crosses, multidimensional Ys.

Integral connectors

90° Ells, 90° Elbow, Tees, Ys, Laterals, Crosses, Fishtail connectors, multidimensional laterals, multidimensional crosses, multidimensional Ys

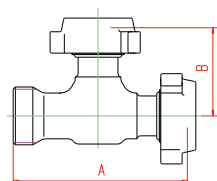
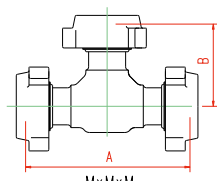
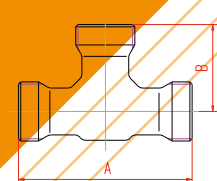
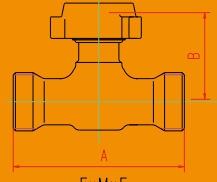
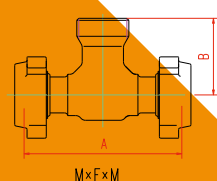
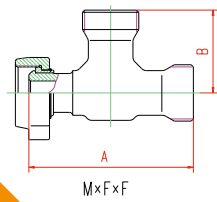
Model	Size	Working pressure	Overall dimensions(mm)		Connection type	Environment		Model	Size	Working pressure	Overall dimensions(mm)		Connection type	Environment	
			A	B							A	B			
SWG42-42-2	2"	42/6000 (Mpa/Psi)	154	154	FIG602 (F × M)	std.		SWG42-42-2	2"	42/6000 (Mpa/Psi)	154	154	FIG602 (F × M)	H ₂ S	
					FIG602 (F × F)	std.							FIG602 (F × F)	H ₂ S	
					FIG602 (M × M)	std.							FIG602 (M × M)	H ₂ S	
					FIG602 (F × M)	std.							FIG602 (F × M)	H ₂ S	
SWG42-42-3	3"	42/6000 (Mpa/Psi)	214	214	FIG602 (F × F)	std.		SWG42-42-3	3"	42/6000 (Mpa/Psi)	214	214	FIG602 (F × F)	H ₂ S	
					FIG602 (M × M)	std.							FIG602 (M × M)	H ₂ S	
					FIG602 (F × M)	std.							FIG602 (F × M)	H ₂ S	
					FIG602 (F × M)	std.							FIG602 (F × M)	H ₂ S	
SWG42-42-4	4"	42/6000 (Mpa/Psi)	214	214	FIG602 (F × F)	std.		SWG42-42-4	4"	42/6000 (Mpa/Psi)	214	214	FIG602 (F × F)	H ₂ S	
					FIG602 (M × M)	std.							FIG602 (M × M)	H ₂ S	
SWG42-70-2	2"	70/10000 (Mpa/Psi)	154	154	FIG1002 (F × M)	std.		SWG42-52-2	2"	51.7Mpa	154	154	FIG1002 (F × M)	H ₂ S	
					FIG1002 (F × F)	std.							FIG1002 (F × F)	H ₂ S	
					FIG1002 (M × M)	std.							FIG1002 (M × M)	H ₂ S	
					FIG1002 (F × M)	std.							FIG1002 (F × M)	H ₂ S	
SWG42-70-3	3"	70/10000 (Mpa/Psi)	214	214	FIG1002 (F × F)	std.		SWG42-52-3	3"	51.7Mpa	214	214	FIG1002 (F × F)	H ₂ S	
					FIG1002 (F × F)	std.							FIG1002 (F × F)	H ₂ S	
					FIG1002 (M × M)	std.							FIG1002 (M × M)	H ₂ S	
					FIG1002 (F × M)	std.							FIG1002 (F × M)	H ₂ S	
SWG42-70-4	4"	70/10000 (Mpa/Psi)	214	214	FIG1002 (F × M)	std.		SWG42-52-4	4"	51.7Mpa	214	214	FIG1002 (F × M)	H ₂ S	
					FIG1002 (F × F)	std.							FIG1002 (F × F)	H ₂ S	
					FIG1002 (M × M)	std.							FIG1002 (M × M)	H ₂ S	
					FIG1502 (F × M)	std.							FIG1502 (F × M)	H ₂ S	
SWG42-105-2	2"	105/15000 (Mpa/Psi)	154	154	FIG1502 (F × F)	std.		SWG42-70-2	2"	105/15000 (Mpa/Psi)	154	154	FIG1502 (F × F)	H ₂ S	
					FIG1502 (M × M)	std.							FIG1502 (M × M)	H ₂ S	
					FIG1502 (F × M)	std.							FIG1502 (F × M)	H ₂ S	
					FIG1502 (F × M)	std.							FIG1502 (F × M)	H ₂ S	
SWG42-105-3	3"	105/15000 (Mpa/Psi)	214	214	FIG1502 (F × F)	std.		SWG42-70-3	3"	105/15000 (Mpa/Psi)	214	214	FIG1502 (F × F)	H ₂ S	
					FIG1502 (M × M)	std.							FIG1502 (M × M)	H ₂ S	
					FIG1502 (F × M)	std.							FIG1502 (F × M)	H ₂ S	
					FIG1502 (F × M)	std.							FIG1502 (F × M)	H ₂ S	
SWG42-105-4	4"	105/15000 (Mpa/Psi)	214	214	FIG1502 (F × F)	std.		SWG42-70-4	4"	105/15000 (Mpa/Psi)	214	214	FIG1502 (F × F)	H ₂ S	
					FIG1502 (M × M)	std.							FIG1502 (M × M)	H ₂ S	
					FIG2002 (F × M)	std.							FIG2002 (F × M)	H ₂ S	
					FIG2002 (F × M)	std.							FIG2002 (F × M)	H ₂ S	
SWG42-140-2	2"	140/20000 (Mpa/Psi)	185	154	FIG2002 (F × F)	std.		SWG42-105-2	2"	140/20000 (Mpa/Psi)	185	154	FIG2002 (F × F)	H ₂ S	
					FIG2002 (M × M)	std.							FIG2002 (M × M)	H ₂ S	
					FIG2002 (F × M)	std.							FIG2002 (F × M)	H ₂ S	
					FIG2002 (F × M)	std.							FIG2002 (F × M)	H ₂ S	
SWG42-140-3	3"	140/20000 (Mpa/Psi)	266.5	266.5	FIG2002 (F × F)	std.		SWG42-105-3	3"	140/20000 (Mpa/Psi)	266.5	266.5	FIG2002 (F × F)	H ₂ S	
					FIG2002 (M × M)	std.							FIG2002 (M × M)	H ₂ S	
					FIG2002 (F × M)	std.							FIG2002 (F × M)	H ₂ S	
					FIG2002 (F × M)	std.							FIG2002 (F × M)	H ₂ S	



90°elbow

Model	Size	Working pressure Mpa/Psi	Overall dimensions(mm) A B	Connection type	Environment
SWG42-42-2C	2"	42/6000 (Mpa/Psi)	162 171	FIG602 (F x M) std.	H ₂ S
SWG42-42-3C	3"	42/6000 (Mpa/Psi)	239 202	FIG602 (F x F) std.	H ₂ S
SWG42-42-4C	4"	42/6000 (Mpa/Psi)	260 250	FIG602 (M x M) std.	H ₂ S
SWG42-70-2C	2"	70/10000 (Mpa/Psi)	162 171	FIG1002 (F x F) std.	H ₂ S
SWG42-70-3C	3"	70/10000 (Mpa/Psi)	239 202	FIG1002 (F x F) std.	H ₂ S
SWG42-70-4C	4"	70/10000 (Mpa/Psi)	260 250	FIG1002 (F x F) std.	H ₂ S
SWG42-150-2C	2"	105/15000 (Mpa/Psi)	162 171	FIG1502 (F x F) std.	H ₂ S
SWG42-150-3C	3"	105/15000 (Mpa/Psi)	239 202	FIG1502 (F x F) std.	H ₂ S
SWG42-150-4C	4"	105/15000 (Mpa/Psi)	260 250	FIG1502 (F x F) std.	H ₂ S
SWG42-140-3C	3"	140/20000 (Mpa/Psi)	279 270	FIG2002 (F x F) std.	H ₂ S

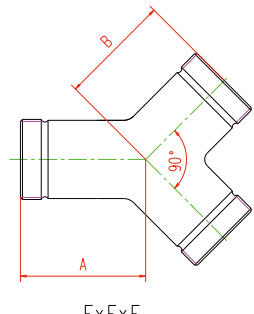
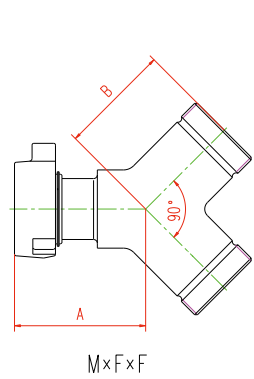
Note:
The customer's purchasing information shall include product name, size, working pressure, connection type (choose end connection type per relevant drawings) and product application environment.



Tees

Model	Size	Working pressure Mpa/Psi	Overall dimensions(mm) A B	Connection type	Environment
SWG43-42-2	2"	42/6000 (Mpa/Psi)	308 154	FIG602(M x F x F) std.	H ₂ S
SWG43-42-3	3"	42/6000 (Mpa/Psi)	428 214	FIG602(F x F x F) std.	H ₂ S
SWG43-42-4	4"	42/6000 (Mpa/Psi)	428 214	FIG602(M x M x M) std.	H ₂ S
SWG43-70-2	2"	70/10000 (Mpa/Psi)	308 154	FIG1002(F x F x F) std.	H ₂ S
SWG43-70-3	3"	70/10000 (Mpa/Psi)	428 214	FIG1002(F x F x F) std.	H ₂ S
SWG43-70-4	4"	70/10000 (Mpa/Psi)	428 214	FIG1002(F x F x F) std.	H ₂ S
SWG43-105-2	2"	105/15000 (Mpa/Psi)	308 154	FIG1502(F x F x F) std.	H ₂ S
SWG43-105-3	3"	105/15000 (Mpa/Psi)	428 214	FIG1502(F x F x F) std.	H ₂ S
SWG43-105-4	4"	105/15000 (Mpa/Psi)	428 214	FIG1502(F x F x F) std.	H ₂ S
SWG43-140-2	2"	140/20000 (Mpa/Psi)	346 185	FIG2002(F x F x F) std.	H ₂ S
SWG43-140-3	3"	140/20000 (Mpa/Psi)	533 266.5	FIG2002(F x F x F) std.	H ₂ S

Note:
The customer's purchasing information shall include product name, size, working pressure, connection type (choose end connection type per relevant drawings) and product application environment.

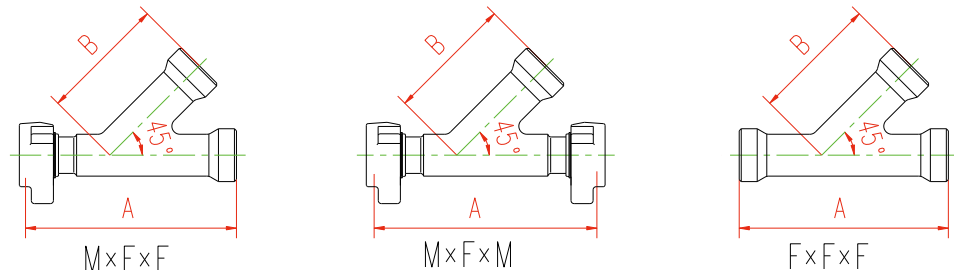


Ys

Model	Size	Working pressure Mpa/Psi	Overall dimensions(mm) A B	Connection type	Environment
SWG45-42-2	2"	42/6000	133 127	FIG602(M x F x F) std.	H ₂ S
SWG45-42-3	3"	42/6000	197 190	FIG602(F x F x F) std.	H ₂ S
SWG45-42-4	4"	42/6000	197 197	FIG602(M x M x M) std.	H ₂ S
SWG45-70-2	2"	70/10000	133 127	FIG1002(F x F x F) std.	H ₂ S
SWG45-70-3	3"	70/10000	197 190	FIG1002(F x F x F) std.	H ₂ S
SWG45-70-4	4"	70/10000	197 197	FIG1002(F x F x F) std.	H ₂ S
SWG45-105-2	2"	105/15000	133 127	FIG1502(F x F x F) std.	H ₂ S
SWG45-105-3	3"	105/15000	197 190	FIG1502(F x F x F) std.	H ₂ S
SWG45-105-4	4"	105/15000	250 240	FIG1502(F x F x F) std.	H ₂ S
SWG45-140-2	2"	140/20000	148 127	FIG2002(F x F x F) std.	H ₂ S
SWG45-140-3	3"	140/20000	270 270	FIG2002(F x F x F) std.	H ₂ S

Model	Size	Working pressure Mpa/Psi	Overall dimensions(mm) A B	Connection type	Environment
SWG45-42-2	2"	42/6000	133 127	FIG602(M x F x F) std.	H ₂ S
SWG45-42-3	3"	42/6000	197 190	FIG602(F x F x F) std.	H ₂ S
SWG45-42-4	4"	42/6000	197 197	FIG602(M x M x M) std.	H ₂ S
SWG45-52-2	2"	52/7500	133 127	FIG1002(F x F x F) std.	H ₂ S
SWG45-52-3	3"	52/7500	197 190	FIG1002(F x F x F) std.	H ₂ S
SWG45-52-4	4"	52/7500	197 197	FIG1002(F x F x F) std.	H ₂ S
SWG45-70-2	2"	70/10000	133 127	FIG1502(F x F x F) std.	H ₂ S
SWG45-70-3	3"	70/10000	197 190	FIG1502(F x F x F) std.	H ₂ S
SWG45-70-4	4"	70/10000	250 240	FIG1502(F x F x F) std.	H ₂ S

Note:
The customer's purchasing information shall include product name, size, working pressure, connection type (choose end connection type per relevant drawings) and product application environment.



Laterals

Model	Size	Working pressure Mpa/Psi	Overall dimensions(mm) A B	Connection type	Environment
SWG44-42-2	2"	42/6000 (Mpa/Psi)	400 250	FIG602(M x F x F) std.	H ₂ S
SWG44-42-3	3"	42/6000 (Mpa/Psi)	533 355	FIG602(F x F x F) std.	H ₂ S
SWG44-42-4	4"	42/6000 (Mpa/Psi)	533 355	FIG602(M x M x M) std.	H ₂ S
SWG44-70-2	2"	70/10000 (Mpa/Psi)	400 250	FIG1002(F x F x F) std.	H ₂ S
SWG44-70-3	3"	70/10000 (Mpa/Psi)	533 355	FIG1002(F x F x F) std.	H ₂ S
SWG44-70-4	4"	70/10000 (Mpa/Psi)	533 355	FIG1002(F x F x F) std.	H ₂ S
SWG44-105-2	2"	105/15000 (Mpa/Psi)	400 250	FIG1502(F x F x F) std.	H ₂ S
SWG44-105-3	3"	105/15000 (Mpa/Psi)	533 355	FIG1502(F x F x F) std.	H ₂ S
SWG44-105-4	4"	105/15000 (Mpa/Psi)	533 355	FIG1502(F x F x F) std.	H ₂ S
*SWG44-140-3	3"	140/20000 (Mpa/Psi)	533 350	FIG2002(F x F x F) std.	H ₂ S

Note: 140Mpa working pressure with inclination angle of 60 degree.

The customer's purchasing information shall include product name, size, working pressure, connection type (choose end connection type as per relevant drawings) and product application environment.