

STEEL MANHOLES AND HAND HOLES

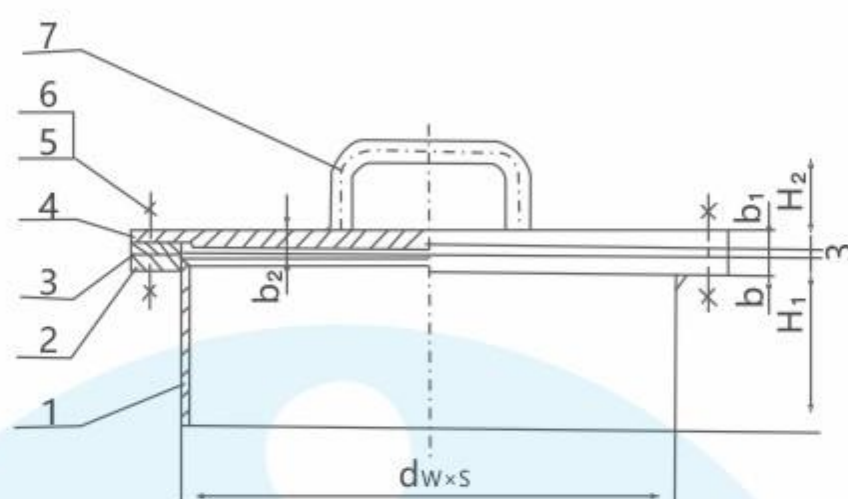
HG/T 21514 ~ 21535-2014

Material list

Part name		Material type and code										
		I	II	III	IV	V	VI	VII	VIII	IX	X	XI
Shell section		Q235B	Q245R	Q345R	15CrMoR	16CrMoR	09MnNiDR	S30403	S30408	S32168	S31603	S31608
			20 (Steel tube)		15CrMo (Steel tube)	Q345E (Steel tube)	09MnNiD (Steel tube)	S30403 (Steel tube)	S30408 (Steel tube)	S32168 (Steel tube)	S31603 (Steel tube)	S31608 (Steel tube)
Francois		Q235B	Q245R	16Mn □Forging□	15CrMo (Forging)	16MnD □Forging□	09MnNiD (Forging)	S30403	S30408	S32168	S31603	S31608
		20 □Forging□						S30403 (Forging)	S30408 (Forging)	S32168 (Forging)	S31603 (Forging)	S31608 (Forging)
Flange cover		Q235B	Q245R	Q345R	15CrMoR	16CrMoR	09MnNiDR	S30403	S30408	S32168	S31603	S31608
Bolt (column)	Hexagon head bolt	8.8级			—			8.8级				
	Full thread stud	35CrMoA										
Nut		8级			30CrMoA			8级				
		30CrMoA						30CrMoA				
Gasket		Non-metal flat gasket										
		Teflon coated gasket			—		Teflon coated gasket					
		—	Metal coated gasket						—			
		—	Winding gasket						—			
		—	Metal ring pad						—			

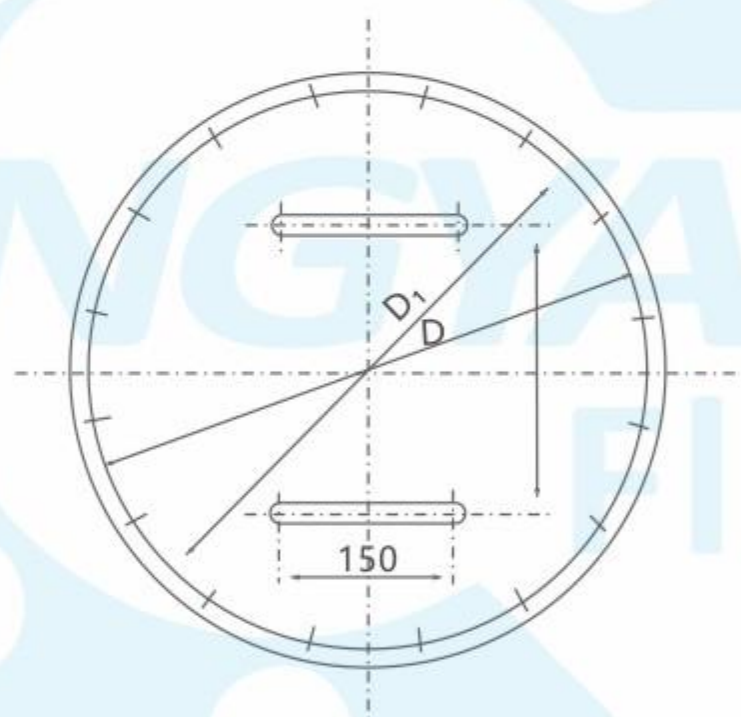
Note: Class 8 nuts and 8.8 hex bolts fixed match; 30CrMoA threaded bolts are fixed and matched.

HG/T21515-2014

PLATE FLAT WELDED STEEL PIPE LARGE DIAMETER FLANGE

1- Barrel section
2- Flange
3- Gasket

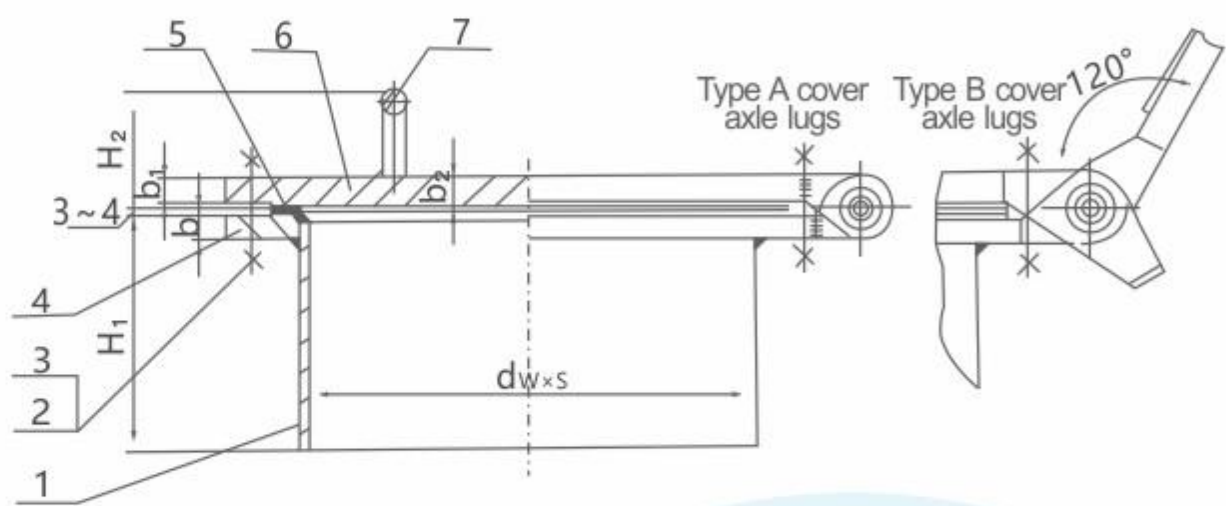
4- Cover
5- Bolt
6- Nut

7- Handle

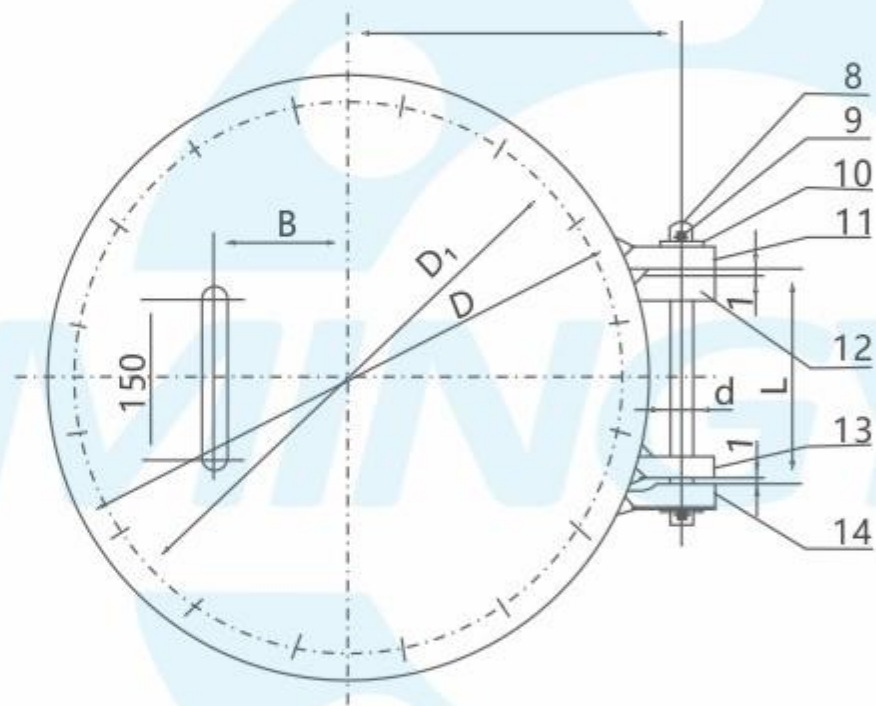


Sealing surface type	DN (mm)	dw x s	D	D ₁	B	b	b ₁	b ₂	H ₁	H ₂	Bolt and nut quantity	bolt Diameter x length (mm)	Quality (kg)
		(mm)											
Whole plane (FF type)	(400)	426 x 6	515	480	250	14	10	12	150	90	16	M16 x 50	38
	450	480 x 6	570	535	250	14	10	12	160	90	20	M16 x 50	46
	500	530 x 6	620	585	300	14	10	12	160	90	20	M16 x 50	52
	600	630 x 6	720	685	300	16	12	14	180	92	24	M16 x 55	76

HG/T 21516-2014
PLATE FLANGE MANHOLES WITH HINGED COVER

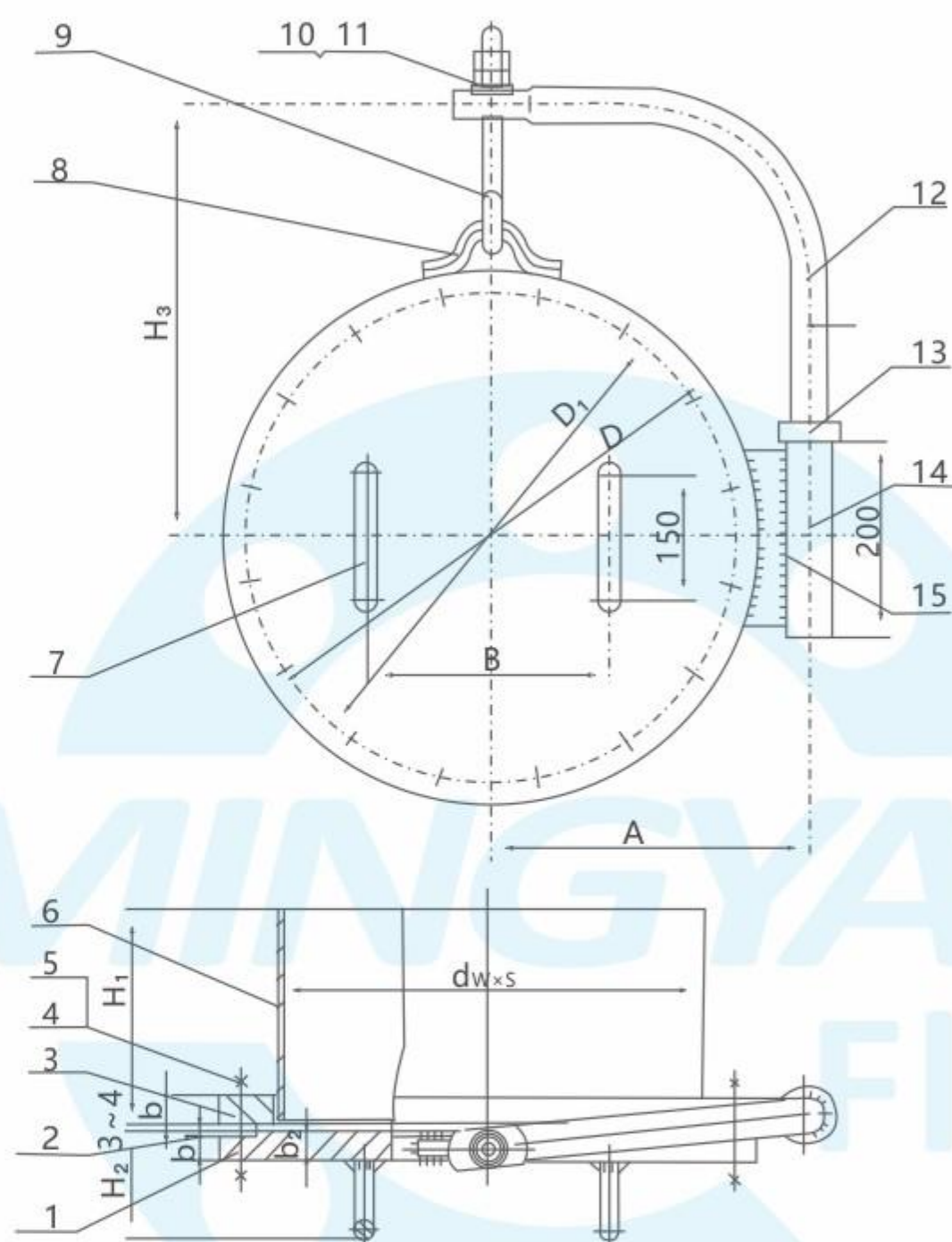


- 1- Barrel section
- 2- Hexagon head bolt (full thread stud)
- 3- Nut
- 4- Flange
- 5- Gasket
- 6- Flange cover
- 7- Handle
- 8- Axle pin
- 9- Pin
- 10- Washer
- 11- Cap shaft lugs (1)
- 12- Flange lugs (1)
- 13- Flange lugs (2)
- 14- Cap shaft lugs (2)



Sealing surface type	PN	DN (mm)	d _w ×s	D	D ₁	A	B	L	b	b ₁	b ₂	H ₁	H ₂	d	Bolt	Nut	Bolt	Bolt	Nut	Bolt	Quantity	
			(mm)										Quantity	Diameter × length(mm)	Quantity	Diameter × length(mm)	Gross mass	among Stainless steel				
Surfacing (Rf)	6	(400)	426×6	540	495	300	125	200	28	20	22	210	102	20	16		M20×85	16	32	M20×115	83	-
			426×5																		81	70
		450	480×6	595	550	330	150	200	30	22	24	220	104	20	16		M20×90	16	32	M20×120	102	-
			480×5																		100	89
		500	530×6	645	600	355	175	250	30	22	24	230	104	20	20		M20×90	20	40	M20×20	118	-
			530×5																		115	102
		600	630×6	755	705	410	225	300	32	28	30	240	110	20	20		M24×100	20	40	M24×135	181	-
			630×6																		181	160

HG/T 21519-2014

PLATE FLANGE MANHOLES WITH DAVIT TO VERTICAL COVER


- 1- Flange cover
- 2- Gasket
- 3-flange
- 4-Hexagon head bolt (full thread stud)
- 5-nut
- 6- Barrel section
- 7- Handle
- 8- The ring
- 9- The hook
- 10-nut
- 11- Washer
- 12- Swivel arm
- 13-ring
- 14- Seamless steel pipe
- 15- Support plate

Sealing surface type	PN	DN (mm)	d _w ×s	D	D ₁	A	B	L	b	b ₁	b ₂	H ₁	H ₂	d	Bolt	Nut	Bolt	Bolt	Nut	Bolt	Quantity	
			(mm)												Quantity		Diameter × length (mm)	Quantity		Diameter × length (mm)	Gross mass	among Stainless steel
Surfacing (Rf)	6	450	480×6	595	550	350	250	220	104	468	30	22	24	36	16		M20×90	16	32	M20×120	110	-
			480×5																		108	89
		500	530×6	645	600	375	300	230	104	493	30	22	24	36	20		M20×90	20	40	M20×120	126	-
			530×5																		123	102
		600	630×6	755	705	430	400	240	110	548	32	28	30	36	20		M24×100	20	40	M24×135	189	-
			630×6																		190	160

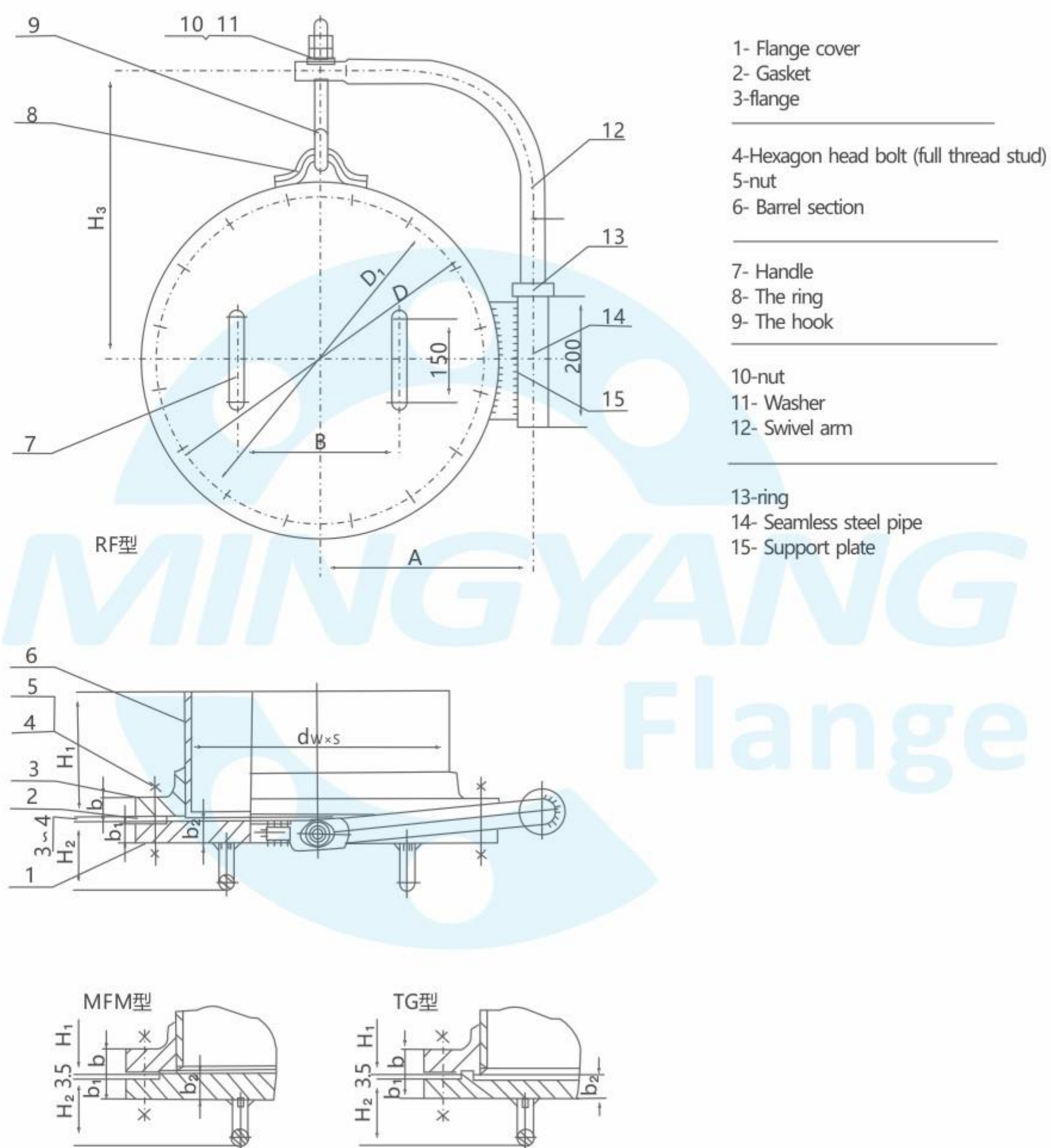
Note: 1. When manholes are used in pressure vessels, this specification does not apply to Q235B.

2. The d_w×s size and quality column of the nominal diameter specifications in the table are suitable for the manholes of class I ~ II carbon steel materials and the manholes of Class VII ~ XI stainless steel materials.

3, the height of the manhole H₁ is determined according to the diameter of the container is not less than two digits of the nominal diameter of the manhole; If there are special requirements, it is allowed to change, but it is necessary to indicate the changed H₁ size and correct the manhole quality.

HG/T 21520-2014

LIP ON FLANGE MANHOLES WITH DAVIT TO VERTICAL VOVER



Sealing surface type	PN	DN (mm)	d _w ×s	D	D ₁	A	B	H ₁	H ₂	H ₃	b	b ₁	b ₂	d	Quantity		Bolt Diameter × length(mm)	Bolt	Nut	Quantity		
															Bolt	Nut				Bolt	Nut	Gross mass
surfacing (RF type)	10	450	480×8	615	565	360	250	230	108	478	28	26	28	36	20	20	M24×90	M24×125	40	40	145	-
			480×6																		140	113
		500	530×8	670	620	385	300	250	108	505	28	26	28	36	20	20	M24×90	M24×125	40	40	169	-
			530×6																		164	136
		600	630×8	780	725	440	400	270	114	560	28	32	34	36	20	20	M27×95	M27×130	40	40	247	-
			630×6																		240	205
	16	450	480×10	640	585	370	300	240	120	490	40	38	40	36	20	20	M27×120	M27×155	40	40	209	-
			480×8																		204	168
		500	530×10	715	650	410	300	260	124	528	44	42	44	36	20	20	M30×130	M30×170	40	40	278	-
			530×8																		273	228
		600	630×10	840	770	475	400	280	134	590	54	52	54	48	20	20	M33×155	M33×200	40	40	440	-
			630×8																		432	368
Concavo-convex surface (MFM)	10	450	480×8	615	565	360	250	230	103	478	28	22.5	28	36	20	20	M24×90	M24×125	40	40	145	-
			480×6																		140	113
		500	530×8	670	620	385	300	250	103	505	28	22.5	28	36	20	20	M24×90	M24×125	40	40	169	-
			530×6																		163	135
		600	630×8	780	725	440	400	270	109	560	28	28.5	34	36	20	20	M27×95	M27×130	40	40	246	-
			630×6																		239	205
	16	450	480×10	640	585	370	300	240	115	490	40	34.5	40	36	20	20	M27×120	M27×155	40	40	209	-
			480×8																		204	168
		500	530×10	715	650	410	300	260	119	528	44	38.5	44	36	20	20	M30×130	M30×170	40	40	278	-
			530×8																		272	228
		600	630×10	840	770	475	400	280	129	590	54	48.5	54	48	20	20	M33×155	M33×200	40	40	439	-
			630×8																		432	368
Tongue and groove face (TG type)	16	450	480×10	640	585	370	300	240	115	490	40	34.5	40	36	20	20	M27×120	M27×155	40	40	209	-
			480×8																		204	168
		500	530×10	715	650	410	300	260	119	528	44	38.5	44	36	20	20	M30×130	M30×170	40	40	278	-
			530×8																		273	228