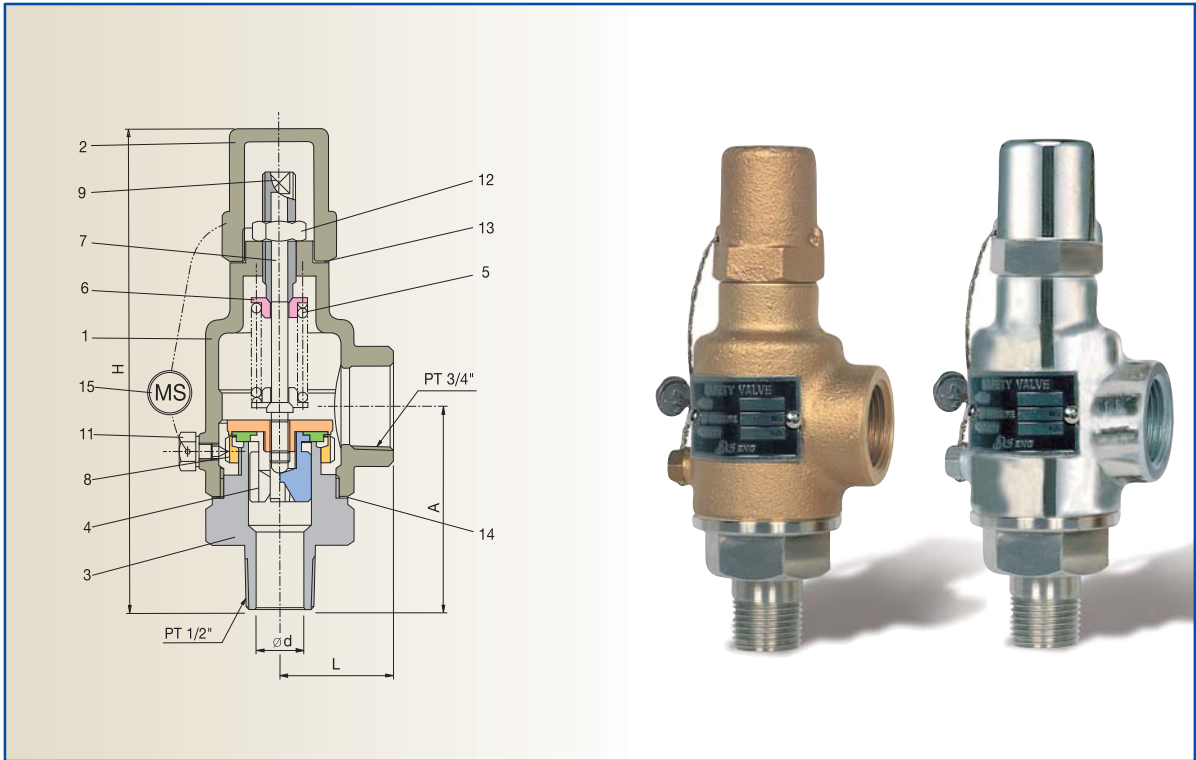


MS ENG. CRYOGENIC SAFETY VALVE

MODEL NO : WCSV-1000



■ MATERIAL

| NO. | PART NAME | MATERIAL | NO. | PART NAME | MATERIAL |
|-----|---------------|----------|-----|--------------|----------|
| 1 | BODY | BC7 | 8 | SPRING DISK | C3604 |
| 2 | CAP | BC7 | 9 | SPINDLE | C3604 |
| 3 | NOZZLE | STS304 | 10 | ADJUST RING | C3604 |
| 4 | VALVE DISK #1 | STS304 | 11 | ADJUST SCREW | C3604 |
| 5 | VALVE DISK #2 | STS304 | 12 | SET NUT | STS304 |
| 6 | VALVE SEAT | PCTFE | 13 | SET BOLT | C3604 |
| 7 | SPRING | STS304 | 14 | MARKING | Pb |

■ SPECIFICATION

- Basic setting pressure : 1.0 MPa, 1.7 MPa
- Design capacity (N₂) : 2457 kg/h (1.0 MPa), 4648 kg/h (1.7 MPa)
- Fluid : L- O₂, N₂, Ar, LNG
- Design temperature : -196℃ ~ +75℃

■ DIMENSION

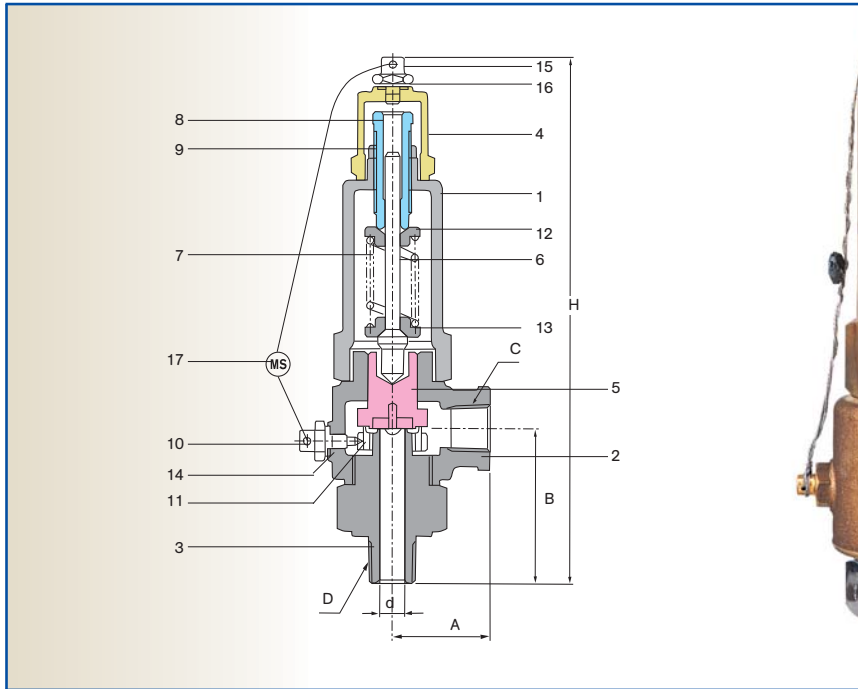
unit : mm

| SIZE | A | d | H | L |
|------|----|------|-----|------|
| 15A | 67 | 14.5 | 150 | 34.5 |

※ LNG용은 일부부품 STS304로 재질 변경.

MS ENG. LINE SAFETY VALVE

MODEL NO : WSC - 5313 M(S)



■ MATERIAL

| NO | PART-NAME | MATERIAL | NO | PART-NAME | MATERIAL |
|----|--------------|----------|----|-------------------|----------|
| 1 | BONNET | C3604B | 11 | ADJUST RING | C3604B |
| 2 | BODY | BC6 | 12 | UPPER SPRING DISK | C3604B |
| 3 | NOZZLE | STS 304 | 13 | LOWER SPRING DISK | C3604B |
| 4 | CAP | C3604B | 14 | PACKING | ASBESTOS |
| 5 | VALVE DISK | STS 304 | 15 | PLUG BOLT | C3604B |
| 6 | SPINDLE | S45C | 16 | PACKING | FIBER |
| 7 | SPRING | STS 304 | 17 | SEAL | Pb |
| 8 | ADJUST SCREW | C3604B | 18 | NAME PLATE | STS 304 |
| 9 | SET NUT | STS 304 | | | |
| 10 | SET BOLT | C3604B | | | |

■ DIMENSION

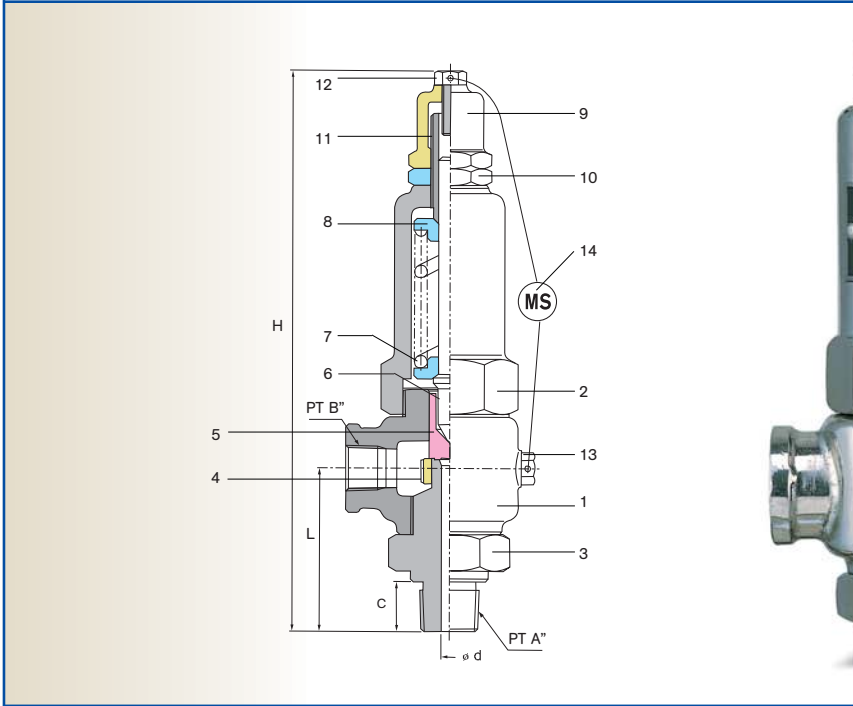
| SIZE | H | A | B | d | C | D |
|------|-----|----|----|----|-----------|-----------|
| 15A | 190 | 35 | 55 | 10 | PT 1/2" | PT 1/2" |
| 20A | 195 | 45 | 64 | 16 | PT 3/4" | PT 3/4" |
| 25A | 199 | 50 | 68 | 20 | PT 1" | PT 1" |
| 40A | 336 | 57 | 86 | 27 | PT 1-1/2" | PT 1-1/2" |

unit : mm

S : SOFT SEAT
M : METAL SEAT

MS ENG. HIGH PRESSURE SAFETY VALVE

MODEL NO : WHS - 5316



MATERIAL

| NO | PART-NAME | MATERIAL | NO | PART-NAME | MATERIAL |
|----|-------------|----------|----|--------------|----------|
| 1 | BODY | STS 304 | 9 | CAP | STS 304 |
| 2 | BONNET | STS 304 | 10 | LOCK NUT | STS 304 |
| 3 | NOZZLE | STS 304 | 11 | ADJUST SCREW | C3604B |
| 4 | ADJUST RING | STS 304 | 12 | PLUG BOLT | STS 304 |
| 5 | VALVE DISK | STS 304 | 13 | SET BOLT | STS 304 |
| 6 | SPINDLE | S45C | 14 | SEAL | Pb |
| 7 | SPRING | STS 304 | 15 | NAME PLATE | STS 304 |
| 8 | SPRING DISK | C3604B | | | |

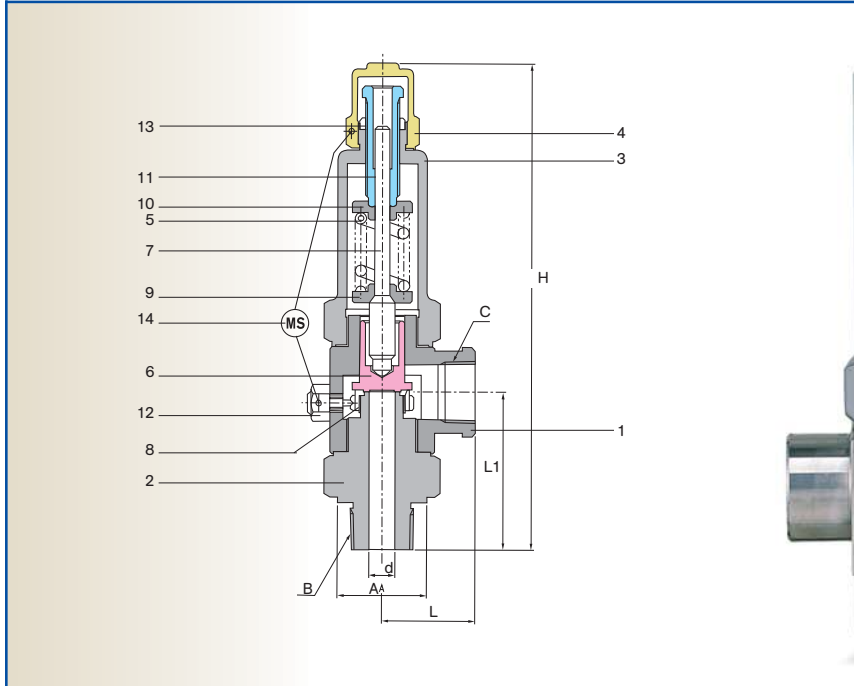
DIMENSION

unit : mm

| SIZE | H | L | C | d | A | B |
|------|-----|----|----|---|---------|---------|
| 15A | 203 | 59 | 18 | 6 | PT 1/2" | PT 3/4" |

MS ENG. LINE SAFETY VALVE

MODEL NO : WLS - 5317



■ MATERIAL

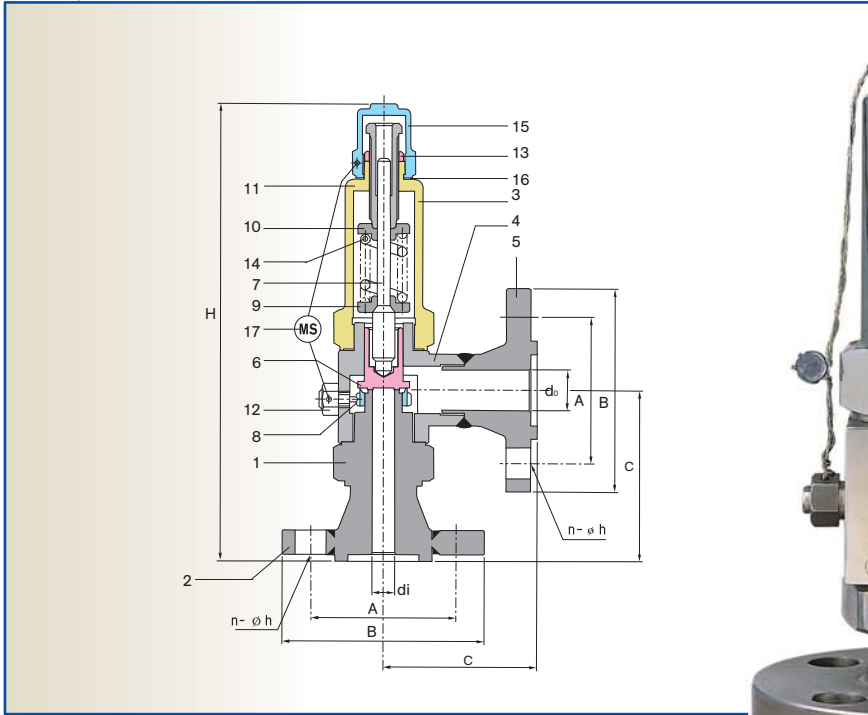
| NO | PART-NAME | MATERIAL | NO | PART-NAME | MATERIAL |
|----|------------|----------|----|-------------------|----------|
| 1 | BODY | STS 304 | 8 | ADJUST RING | STS 304 |
| 2 | NOZZLE | STS 304 | 9 | LOWER SPRING DISK | STS 304 |
| 3 | BONNET | STS 304 | 10 | UPPER SPRING DISK | STS 304 |
| 4 | CAP | STS 304 | 11 | ADJUST SCREW | STS 304 |
| 5 | SPRING | STS 304 | 12 | SET BOLT | STS 304 |
| 6 | VALVE DISK | STS 304 | 13 | SET NUT | STS 304 |
| 7 | SPINDLE | STS 304 | 14 | SEAL | Pb |

■ DIMENSION

unit : mm

| SIZE | H | L | L ₁ | d | A | B | C |
|------|-----|----|----------------|----|----|-----------|-----------|
| 10A | 205 | 35 | 62 | 8 | 30 | PT 3/8" | PT 3/8" |
| 15A | 214 | 39 | 67 | 10 | 35 | PT 1/2" | PT 1/2" |
| 20A | 237 | 42 | 78 | 12 | 36 | PT 3/4" | PT 3/4" |
| 25A | 270 | 50 | 84 | 16 | 42 | PT 1" | PT 1" |
| 40A | 324 | 70 | 100 | 19 | 45 | PT 1 1/2" | PT 1 1/2" |
| 50A | 470 | 86 | 125 | 24 | 48 | PT 2" | PT 2" |

MODEL NO : WSSG - 5329



■ MATERIAL

| NO | PART-NAME | MATERIAL | NO | PART-NAME | MATERIAL |
|----|-------------------|----------|----|-------------------|----------|
| 1 | NOZZLE | STS 304 | 10 | UPPER SPRING DISK | STS 304 |
| 2 | INLET FLANGE | STS 304 | 11 | ADJUST SCREW | STS 304 |
| 3 | BONNET | STS 304 | 12 | SET BOLT | STS 304 |
| 4 | BODY | STS 304 | 13 | SET NUT | STS 304 |
| 5 | OUTLET FLANGE | STS 304 | 14 | SPRING | STS 304 |
| 6 | VALVE DISK | STS 304 | 15 | CAP | STS 304 |
| 7 | SPINDLE | STS 304 | 16 | GASKET | P.T.F.E |
| 8 | ADJUST RING | STS 304 | 17 | SEAL | Pb |
| 9 | LOWER SPRING DISK | STS 304 | | | |

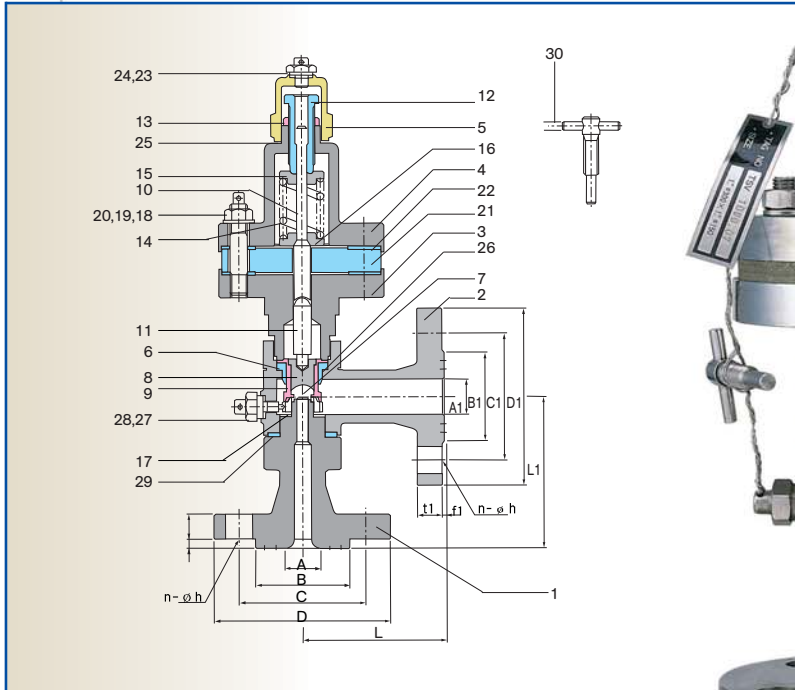
■ DIMENSION

unit : mm

| SIZE | H | A | B | C | di | do | n - øh |
|------|-----|-----|-----|-----|----|----|--------|
| 15A | 220 | 70 | 95 | 80 | 10 | 15 | 4 -15 |
| 20A | 250 | 75 | 100 | 90 | 12 | 20 | 4 -15 |
| 25A | 280 | 90 | 125 | 95 | 16 | 25 | 4 -19 |
| 40A | 340 | 105 | 140 | 120 | 19 | 40 | 4 -19 |
| 50A | 380 | 120 | 155 | 125 | 26 | 50 | 8 -19 |

MS ENG. CRYOGENIC SAFETY VALVE

MODEL NO : WCSV - 5328



MATERIAL

| NO | PART-NAME | MATERIAL | NO | PART-NAME | MATERIAL |
|----|-------------------|----------|----|-------------------|---------------|
| 1 | NOZZLE | STS 316L | 16 | LOWER SPRING DISK | STS 316L |
| 2 | BODY | STS 316L | 17 | ADJUST RING | STS 316L |
| 3 | EXTENSION BONNET | STS 316L | 18 | STUD BOLT | STS 304 |
| 4 | BONNET | STS 316L | 19 | NUT | STS 304 |
| 5 | CAP | STS 316L | 20 | SPRING WASHER | STS 304 |
| 6 | GUIDE | STS 316L | 21 | THERMAL BARRIER | ASBESTORITH |
| 7 | DISK PLATE | STS 316L | 22 | GASKET | KLINGER OILIT |
| 8 | DISK HOLDER | STS 316L | 23 | PLUG BOLT | STS 316L |
| 9 | VALVE DISK | STS 316L | 24 | PACKING | KLINGER OILIT |
| 10 | SPINDLE | STS 316L | 25 | PACKING | KLINGER OILIT |
| 11 | SPINDLE LINK | STS 316L | 26 | PACKING | KLINGER OILIT |
| 12 | ADJUST SCREW | STS 316L | 27 | SET BOLT | STS 316L |
| 13 | SET NUT | STS 316L | 28 | PACKING | KLINGER OILIT |
| 14 | SPRING | STS 304 | 29 | NOZZLE GASKET | KLINGER OILIT |
| 15 | UPPER SPRING DISK | STS 316L | 30 | TEST GAG | KLINGER OILIT |

DIMENSION

unit : mm

| SIZE | H | L | L1 | A | a | INLET FLANGE | | | | | | OUTLET FLANGE | | | | | |
|------|-----|-----|-----|----|----|--------------|----|-----|----|---|------|---------------|----|-----|----|---|------|
| | | | | | | B | C | D | E | F | N-øH | b | c | d | e | f | n-øh |
| 25A | 328 | 100 | 100 | 25 | 25 | 60 | 90 | 125 | 15 | 1 | 4-19 | 67 | 90 | 125 | 15 | 1 | 4-19 |

S : SOFT SEAT
M : METAL SEAT