

## Hydraulic Equipment Piping Joint Type

### Screw connection type

The screw connection type refers to the type of connection where pipes are connected to hydraulic equipment using threads on the connection ports.

There are two types of thread, "parallel thread pipe" and "taper thread pipe" .

#### ● Example of threads used

Thread type	Name	Standard	Example indication
Parallel thread	Parallel thread pipe	JIS B 0202 (1982)	G <sup>3</sup> / <sub>4</sub> A (Parallel male screw) G <sup>3</sup> / <sub>4</sub> B (Parallel male screw) G <sup>3</sup> / <sub>4</sub> (Parallel female screw)
	Unified fine thread	JIS B 0208 (1973)	7/16-20UNF-2B
Taper thread	Taper thread pipe	JIS B 0203 (1982)	R <sup>3</sup> / <sub>4</sub> (Tapered male screw) Rc <sup>3</sup> / <sub>4</sub> (Tapered female screw) Rp <sup>3</sup> / <sub>4</sub> (Parallel female screw)
	American standard taper thread pipe	ANSI	NPT <sup>3</sup> / <sub>8</sub>
	Dry seal type American standard taper thread pipe	ANSI	NPTF <sup>1</sup> / <sub>16</sub>

#### ● Sealing on threads

Thread type	Seal type	Remarks
Parallel thread	O-ring seal	JIS B 2351 (1990) "Bite type tube fitting for 25 MPa {250 kgf/cm <sup>2</sup> } hydraulic pressure" includes the parallel threaded O-ring boss and edge seal types.
		SAE J 514 "UNF threaded O-ring boss"
	Molded packing (bonded seal)	Bonded seal from Ihara Science Corporation is recommended.
Taper thread	Sealing tape, liquid seal	

### Flange connection type

The flange connection type refers to the type of connection where pipes are connected to hydraulic equipment using flanges.

#### ● JIS B 2291 (1994) Pipe flange for 21 MPa {210 kgf/cm<sup>2</sup>} hydraulic pressure

Piping shape	Bolt type	O-ring groove	Type code
Straight pipe line	Hexagon bolt	Provided	SHA
		Not provided	SHB
	Hexagon socket head cap bolt	Provided	SSA
		Not provided	SSB
Right-angled pipe line	Hexagon socket head cap bolt	Provided	LSA

#### ● SAE J 518 (with four bolts) split flange

- Standard-pressure series
- High-pressure series

(DAIKIN's pumps conform to the standard-pressure series.)

### Gasket mount type

The gasket mount type refers to the type of connection where pipes are connected to sub-plates or manifolds with gasket seals using multiple bolts.