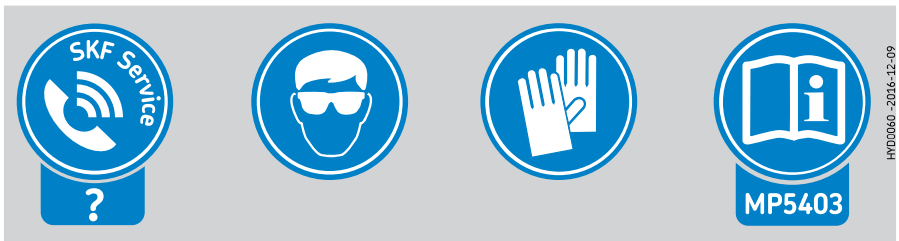


SKF High Pressure Pipes

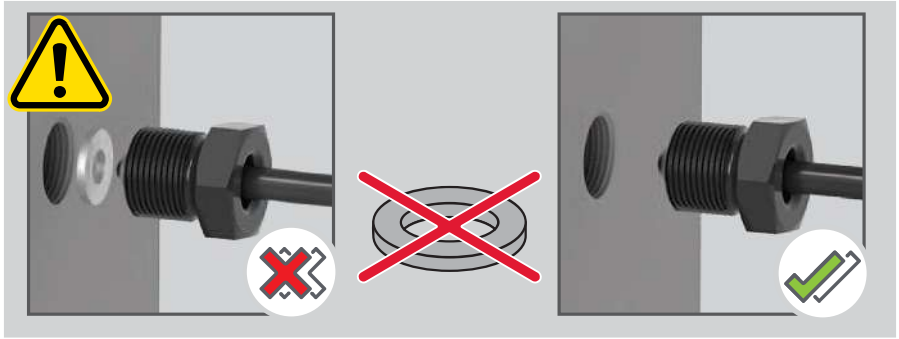
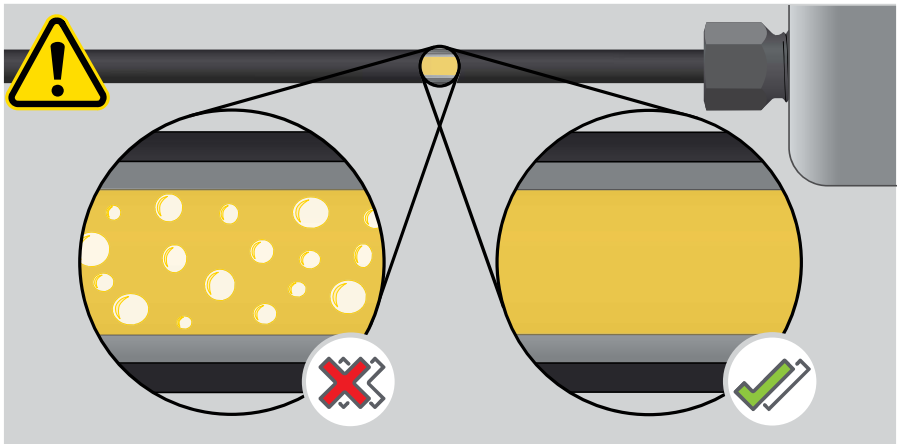
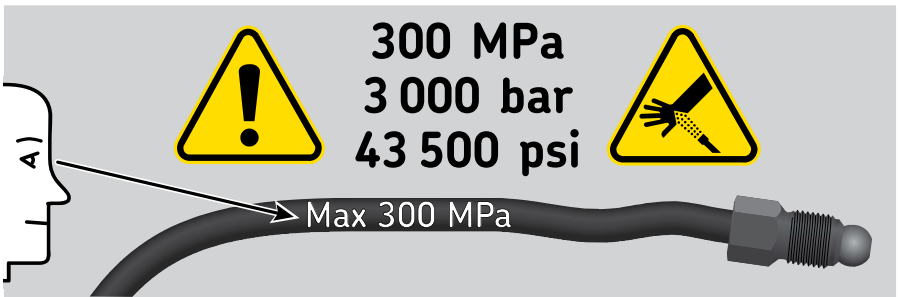


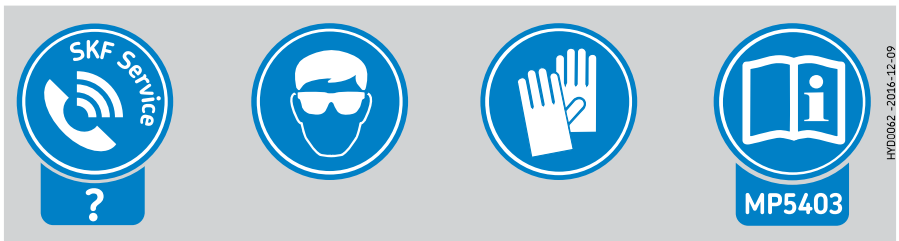
Instructions for use
Mode d'emploi
Bedienungsanleitung
Instrucciones de uso
Manuale d'istruzioni
Bruksanvisning

Gebruiksaanwijzing
Instruções de uso
使用说明书
Инструкция по эксплуатации
取扱説明書

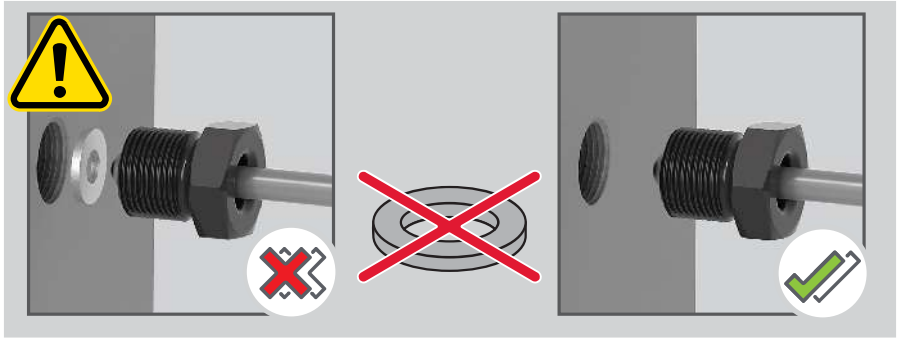
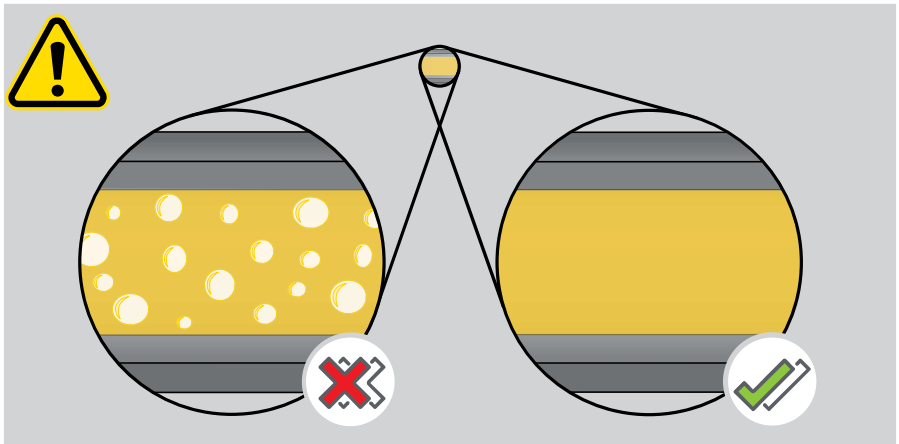
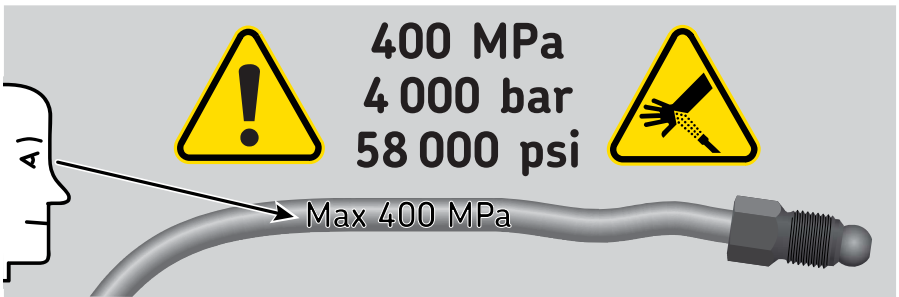


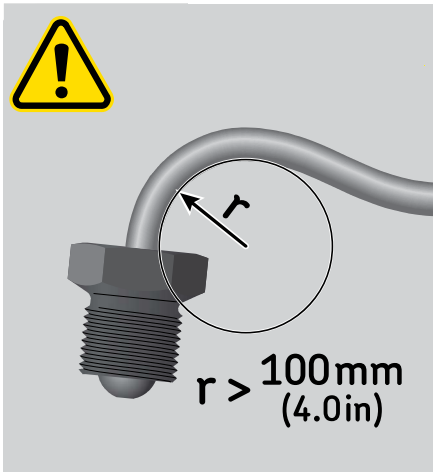
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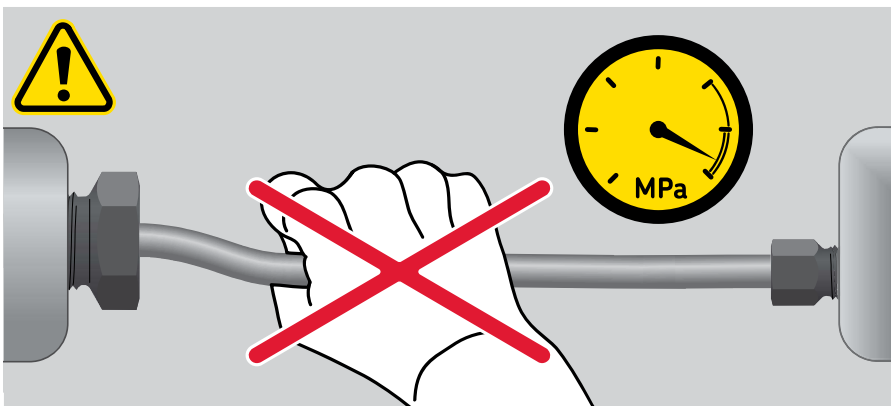
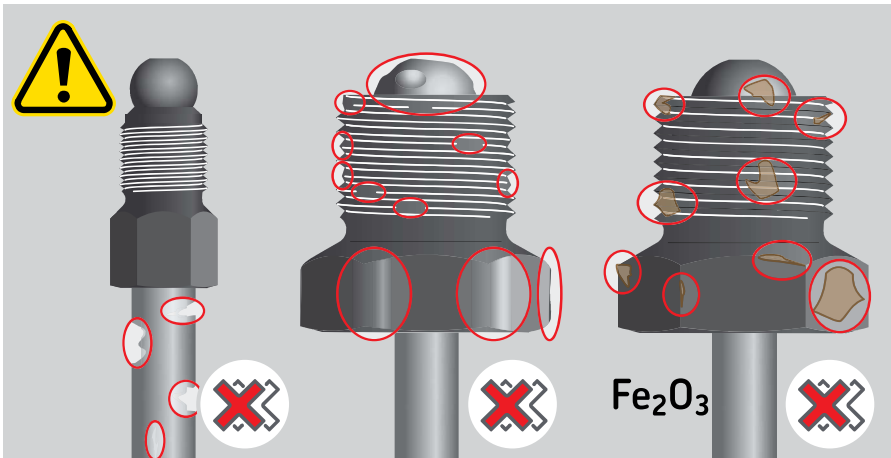


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English

Original instructions



READ THIS FIRST Safety precautions

Read this instruction for use fully. Follow all safety precautions to avoid personal injury or property damage during equipment operation. SKF cannot be responsible for damage or injury resulting from unsafe product use, lack of maintenance or incorrect equipment operation. In case of any uncertainties as regards the use of the equipment contact SKF.

Failure to comply with the following could cause equipment damage and personal injury.

- Do ensure that the equipment is only operated by trained personnel.
- Do wear proper personal protective gear, such as eye protection and protective gloves, when operating the equipment.
- Do inspect the equipment and all accessories carefully before use.
- Do not use damaged components or modify the equipment.
- When not in use, store the pipe in the original anti-corrosive packaging.
- Do use clean recommended hydraulic oils (SKF LHM 300, LHDF 900 or similar).
- Do not use glycerin or water based fluids as a pressure medium. Premature equipment wear or damage can result.
- Do not use the equipment above the stated maximum working pressure.
- Do not use washers on sealing surfaces
- Do use a pressure gauge to monitor the oil outlet pressure, wherever possible.
- Do ensure that all the air has been removed from the hydraulic system before pressurising the hydraulic system
- Do prevent the workpiece (e.g. bearing, gearwheel or similar item) from being forcibly ejected upon sudden release of pressure (e.g. by use of retaining nut).
- Do not handle high pressure pipes when pressurized. Oil under pressure can penetrate the skin, causing serious injury or death. If oil is injected under the skin, seek medical attention immediately.
- Do not use damaged high pressure pipes. Avoid sharp bends and kinks when connecting pipes. Sharp bends and kinks could internally damage the pipe leading to premature failure. Minimum bending radius 100 mm (4 in.).
Applying pressure to a damaged pipe may cause it to rupture.
- Do not leave the equipment unattended whilst operating.
- Do follow local safety regulations
- Do replace worn or damaged parts with genuine SKF parts.

Important

For safety reasons, high-pressure pipes have a maximum service life.

All SKF high pressure pipes are hard-marked with the year in which their service life expires; e.g. DO NOT USE AFTER 2023.

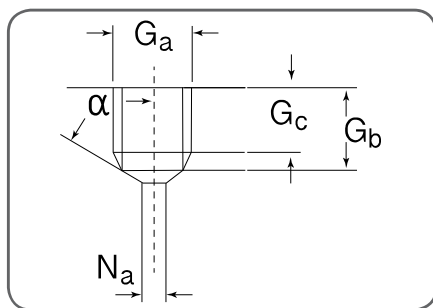
1. Application

High pressure pipes are used when an oil injector cannot be connected directly to a pressure joint or when an adaptor block is needed to connect a pressure gauge.

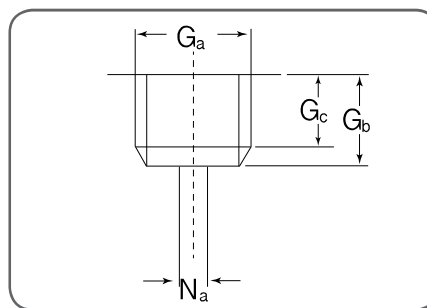
The connection hole on the application side should be designed in accordance to the details given below.

Thread	Design	Angle	Dimensions					
			Ga	Gb	Gb	Gc ¹⁾	Gc ¹⁾	Na max.
-	-	α degrees	mm	in.	mm	in.	mm	in.
M 4X0,5	A	60	5	0.20	4	0.16	2	0.08
M 6	A	60	10	0.39	8	0.31	3	0.12
G 1/8	A	60	12 ²⁾	0.47 ²⁾	10 ²⁾	0.39 ²⁾	3	0.12
G 1/4	A	60	15	0.59	12	0.47	5	0.20
G 3/8	B	-	15	0.59	12	0.47	8	0.31
G 1/2	B	-	18	0.71	14	0.55	8	0.31
G 3/4	B	-	20	0.79	16	0.63	8 ³⁾	0.31 ³⁾

- 1) Effective threaded length.
- 2) Minimum value which may be increased by 2 mm (0.08 in.) if material thickness allows.
- 3) Minimum value 6 mm (0.24 in.).



Design A



Design B

2. Description

High pressure pipes consist of a hollow steel pipe with a steel ball fitted in each end. Two swivelling connection nipples press these balls against the seating of the connection holes.

3. Technical data

Maximum working pressure	300 MPa (43 500 psi)
Outer diameter	4 mm (0.16 in.)
Inner diameter	1,6 mm (0.063 in.)
Minimum bending radius	100 mm (4 in.)

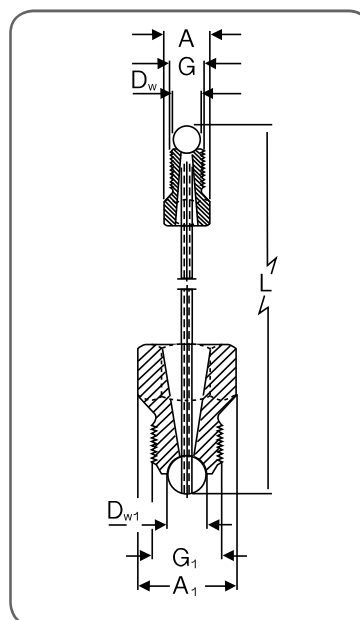
Designation	Dimensions												Weight	
	G	G1	A	A	A ₁	A ₁	D _w	D _w	D _{w1}	D _{w1}	L	L	kg	lb
	in G	in G	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.		
721740 A	1/8	3/4	11,5	0.45	36,9	1.45	7,94	0.31	15,88	0.63	1 000	39	0,3	0.7
227957 A*	1/4	3/4	17,3	0.68	36,9	1.45	11,11	0.44	15,88	0.63	2 000	78	0,4	0.9
227958 A*	3/4	3/4	36,9	1.45	36,9	1.45	15,88	0.63	15,88	0.63	2 000	78	0,6	1.3
1020612 A**	1/4	1/4	17,3	0.68	17,3	0.68	11,11	0.44	11,11	0.44	1 000	39	0,5	1.1
728017 A	1/4	1/4	17,3	0.68	17,3	0.68	11,11	0.44	7,94	0.31	300	12	0,2	0.4

- * These pipes are also available in a 400 MPa execution. Designations are 227957 A/400MP and 227958 A/400MP. Outer diameter of the pipe is 6 mm (0.24 in.).
- ** Maximum working pressure 400 MPa (58 000 psi). Outer diameter of the pipe 6 mm (0.24 in.). Minimum bending radius 100 mm (4 in.).

Maximum tightening torque (Mt)		
Nipple thread	max torque (Nm)	max torque (lb.ft)
G 3/4	130	96
G 1/4	37	27
G 1/8	13	9.5

On request pipes can be delivered in any length between 300 mm (12 in.) and 4 000 mm (157 in.).

High pressure pipes are marked with their maximum working pressure e.g. MAX 400MPa.



4. Operation instructions

- a) Bend the pipe to the desired working position.
- b) Make sure all air has been removed from injector and pipe.
- c) Firmly tighten the connection nipples.
- d) Never bend a pipe when pressurized.

5. Connection nipples

Designation	Description	Maximum working pressure
1014357 A	F G1/4 to M G1/8	300 MPa (43 500 psi)
1009030 B	F G3/8 to M G1/8	300 MPa (43 500 psi)
1019950	F G1/2 to M G1/8	300 MPa (43 500 psi)
1018219 E	F G3/8 to M G1/4	400 MPa (58 000 psi)
1018220 E	F G1/4 to M G1/4	400 MPa (58 000 psi)
1009030 E	F G3/4 to M G1/4	400 MPa (58 000 psi)
1012783 E	F G1/4 to M G3/8	400 MPa (58 000 psi)
1008593 E	F G3/4 to M G3/8	400 MPa (58 000 psi)
1016402 E	F G1/4 to M G1/2	400 MPa (58 000 psi)
729146	F G3/4 to M G1/2	300 MPa (43 500 psi)
228027 E	F G1/4 to M G3/4	400 MPa (58 000 psi)

