

# Hydraulic pumps



50 MPa (7 250 psi)

## SKF Hydraulic Pump TMJL 50

The SKF TMJL 50 is mainly intended for larger SKF Hydraulic Nuts and SKF OK Coupling hydraulic chambers, but is also suitable for applications where a maximum pressure of 50 MPa (7 250 psi) is required.

- Large oil container capacity 2 700 cm<sup>3</sup> (165 in.<sup>3</sup>)
- Over pressure valve and connection port for a pressure gauge
- Packed in a sturdy protective case

### Applications

- SKF OK Coupling hydraulic chambers
- All sizes SKF Hydraulic Nuts
- All other oil injection applications where the maximum pressure is 50 MPa (7 250 psi)



100 MPa (14 500 psi)

## SKF Hydraulic Pump 729124

The SKF 729124 is mainly intended for SKF Hydraulic Nuts (≤ HMV 54E) to mount bearings or components where a maximum pressure of 100 MPa (14 500 psi) is required.

- Oil container capacity 250 cm<sup>3</sup> (15 in.<sup>3</sup>)
- Fitted with a pressure gauge
- Packed in a sturdy protective case

### Applications

- SKF Hydraulic Nuts ≤ HMV 54E
- All other oil injection applications where the maximum pressure is 100 MPa (14 500 psi)
- For applications where space does not permit the use of a quick connect coupling and nipple, such as AOH sleeves, a special pump design is available (SKF 729124 A)

### Technical data

Designation	TMJL 50	729124	TMJL 100	728619 E
Maximum pressure	50 MPa (7 250 psi)	100 MPa (14 500 psi)	100 MPa (14 500 psi)	150 MPa (21 750 psi)
Oil container capacity	2 700 cm <sup>3</sup> (165 in. <sup>3</sup> )	250 cm <sup>3</sup> (15 in. <sup>3</sup> )	800 cm <sup>3</sup> (48 in. <sup>3</sup> )	2 550 cm <sup>3</sup> (155 in. <sup>3</sup> )
Volume/stroke	3,5 cm <sup>3</sup> (0.21 in. <sup>3</sup> )	0,5 cm <sup>3</sup> (0.03 in. <sup>3</sup> )	1,0 cm <sup>3</sup> (0.06 in. <sup>3</sup> )	1st stage: 20 cm <sup>3</sup> below 2,5 MPa (1.2 in. <sup>3</sup> below 362 psi) 2nd stage: 1 cm <sup>3</sup> above 2,5 MPa (0.06 in. <sup>3</sup> above 362 psi)
Length of pressure hose fitted with quick connection coupling	3 000 mm (118 in.)	1 500 mm (59 in.)	3 000 mm (118 in.)	3 000 mm (118 in.)
Connection nipple (included)	G <sup>3</sup> / <sub>4</sub> quick connection	G <sup>3</sup> / <sub>4</sub> quick connection	G <sup>3</sup> / <sub>4</sub> quick connection	G <sup>3</sup> / <sub>4</sub> quick connection
Weight	12 kg (26 lb)	3,5 kg (8 lb)	13 kg (29 lb)	11,4 kg (25 lb)

All SKF Hydraulic Pumps are filled with SKF Mounting Fluid and are supplied with an extra litre of fluid.



Large oil container 100 MPa (14 500 psi)

### SKF Hydraulic Pump TMJL 100

The SKF TMJL 100 pump is mainly intended for use with hydraulic nuts ( $\leq$  HMV 92E) to mount bearings or components where a maximum pressure of 100 MPa (14 500 psi) is required.

- Oil container capacity 800 cm<sup>3</sup> (48 in.<sup>3</sup>)
- Fitted with a pressure gauge
- Packed in a sturdy protective case

#### Applications

- SKF Hydraulic Nuts  $\leq$  HMV 92E
- All other oil injection applications where the maximum pressure is 100 MPa (14 500 psi)
- Suitable with SKF Hydraulic Assisted Pullers TMHP series



150 MPa (21 750 psi)

### SKF Hydraulic Pump 728619 E

The SKF 728619 E is a two-stage pump suitable for use with SKF Supergrip Bolts and to mount bearings or components where a maximum pressure of 150 MPa (21 750 psi) is required.

- Oil container capacity 2 550 cm<sup>3</sup> (155 in.<sup>3</sup>)
- Two stage pressure pumping
- Fitted with a pressure gauge
- Packed in a sturdy protective case

#### Applications

- SKF Supergrip Bolts
- All other oil injection applications where the maximum pressure is 150 MPa (21 750 psi)
- All sizes SKF Hydraulic Nuts



### SKF Mounting Fluid LHM 300 and SKF Dismounting Fluid LHM 900

SKF mounting and dismounting fluids are suitable for use with SKF hydraulic equipment, including hydraulic pumps, HMV ..E nuts and oil injection tools in mounting and dismounting jobs. All SKF Hydraulic Pumps are filled with SKF Mounting Fluid LHM 300 and are supplied with an extra litre of fluid.

For more information, see page 69

# Oil Injectors

To enable the SKF Oil Injection Method to be used, a range of oil injectors, kits and sets are available. Depending on the model chosen, working pressures up to 400 MPa (58 000 psi) can be achieved. In addition, a comprehensive range of high pressure accessories such as pipes, connection nipples, extension pipes and plugs permit the use of SKF Oil Injectors for many different applications.



300 and 400 MPa (43 500 and 58 000 psi)

## SKF Oil Injector 226400 E series

The 226400 E series is suitable for many applications using the SKF Oil Injection Method. The injector is supplied with an oil reservoir in a compact carrying case.

The injector can be mounted directly onto the work piece or connected to an adapter block to make a floor standing model, making it easy to connect pressure gauges and high-pressure pipes. For applications where 400 MPa (58 000 psi) is required, the SKF 226400 E/400 is available.

- Easy to operate.
- Compact carrying case.
- When the pressure is released, the unused oil is automatically returned to the reservoir, minimizing the risk of oil leakage to the environment.
- Oil container capacity 200 cm<sup>3</sup> (12.2 in.<sup>3</sup>).
- Can be used with a wide range of accessories, such as:
  - Adapter block
  - Pressure gauges
  - High pressure pipes
  - Connecting nipples



### Technical data

Designation	226400 E 729101/300MPa	226400 E/400 729101/400MPa	THKI 300	THKI 400
Maximum pressure	300 MPa (43 500 psi)	400 MPa (58 000 psi)	300 MPa (43 500 psi)	400 MPa (58 000 psi)
Volume per stroke	0,23 cm <sup>3</sup> (0.014 in. <sup>3</sup> )	0,23 cm <sup>3</sup> (0.014 in. <sup>3</sup> )	0,23 cm <sup>3</sup> (0.014 in. <sup>3</sup> )	0,23 cm <sup>3</sup> (0.014 in. <sup>3</sup> )
Oil reservoir capacity	200 cm <sup>3</sup> (12.2 in. <sup>3</sup> )	200 cm <sup>3</sup> (12.2 in. <sup>3</sup> )	200 cm <sup>3</sup> (12.2 in. <sup>3</sup> )	200 cm <sup>3</sup> (12.2 in. <sup>3</sup> )
Connecting threads	G <sup>3</sup> / <sub>4</sub>	G <sup>3</sup> / <sub>4</sub>	G <sup>3</sup> / <sub>4</sub>	G <sup>3</sup> / <sub>4</sub>



300 and 400 MPa (43 500 and 58 000 psi)

### SKF Oil Injection Kits 729101 series

The 729101 series of SKF Oil Injection Kits are suitable for many applications using the SKF Oil Injection Method. Each kit contains an SKF Oil Injector complete with a high pressure pipe, pressure gauge, adapter block and a range of connection nipples.

- Injector can be used directly on the application or by connecting to the accessories provided
- All items packed in a sturdy, compact carrying case especially suitable for field use
- When the pressure is released, the unused oil is automatically returned to the reservoir, minimizing the risk of oil leakage to the environment
- Oil container capacity 200 cm<sup>3</sup> (12.2 in.<sup>3</sup>).



300 and 400 MPa (43 500 and 58 000 psi)

### SKF Oil Injection Set THKI series

The SKF THKI series is used for the mounting and dismantling of pressure joints of all sizes and applications such as rolling bearings, couplings, gears, flywheels and railway wheels. The set consists of a stand-mounted oil injector complete with a high pressure pipe, pressure gauge and a range of connection nipples.

- Designed to be especially suitable for workshop use.
- When the pressure is released, the unused oil is automatically returned to the reservoir, minimizing the risk of oil leakage to the environment.
- Oil container capacity 200 cm<sup>3</sup> (12.2 in.<sup>3</sup>).
- Can be used for applications requiring a maximum pressure of up to 400 MPa (58 000 psi).

#### Contents list

Designation	729101/300MPA	729101/400MPA	THKI 300	THKI 400
Oil injector	226400 E	226400 E/400	1077589	1077589/3
Adapter block	226402	226402	227957 A	227957 A/400 MP
Pressure gauge	1077589	1077589/3	1077589	1077589/3
High pressure pipe (G <sup>3/4</sup> -1/4)	227957 A	227957 A/400 MP	227957 A	227957 A/400 MP
Connection nipple (G <sup>1/4</sup> -1/8)	1014357 A	–	1014357 A	–
Connection nipple (G <sup>1/4</sup> -1/2)	1016402E	1016402E	1016402E	1016402E
Connection nipple (G <sup>1/4</sup> -3/4)	228027E	228027E	228027E	228027E
Mounting fluid	–	–	LHMF 300/1	LHMF 300/1
Carrying case	Yes	Yes	Yes	Yes

# Air-driven hydraulic pumps and injectors

30, 150, 300 and 400 MPa (4 350, 21 750, 43 500 and 58 000 psi)

## SKF Air-driven Hydraulic Pumps and Oil Injectors, THAP E series

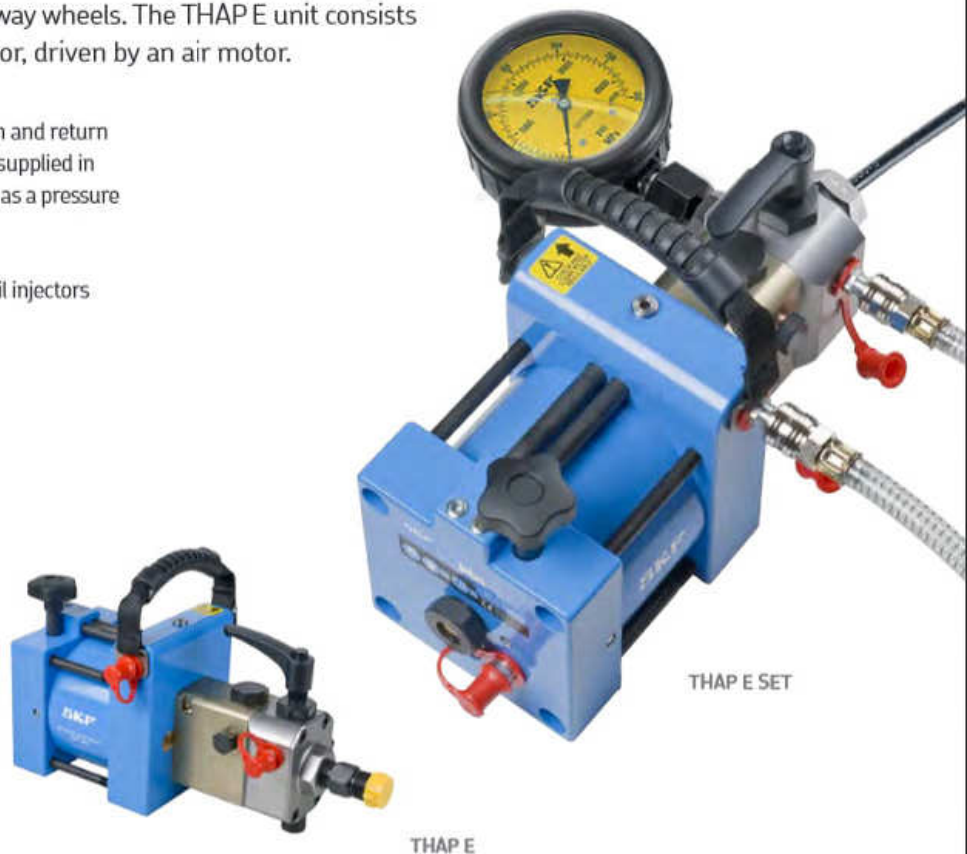
The THAP E air-driven hydraulic pumps and oil injectors are available in four different pressure versions. They can be used for mounting OK Couplings, large pressure joints such as bearings, flywheels, couplings and railway wheels. The THAP E unit consists of a hydraulic pump or high pressure oil injector, driven by an air motor.

The units are supplied in a sturdy case including oil suction and return hoses with quick connect couplings. The units can also be supplied in complete sets, consisting of a THAP E and such accessories as a pressure gauge, high pressure pipe or pressure hose.

- Time savings compared to hand operated pumps and oil injectors
- Portable
- Continuous supply of oil
- Sturdy storage boxes
- Low, medium and high pressure units

### Applications

- SKF OK Couplings
- Mounting bearings
- Mounting ship propellers, rudder pintles, railway wheels and other similar applications



### Technical data

Designation	THAP 030E	THAP 150E	THAP 300E	THAP 400E
Nominal hydraulic pressure	30 MPa (4 350 psi)	150 MPa (21 750 psi)	300 MPa (43 500 psi)	400 MPa (58 000 psi)
Maximum air pressure	7 bar (101.5 psi)	7 bar (101.5 psi)	7 bar (101.5 psi)	7 bar (101.5 psi)
Volume/stroke	10 cm <sup>3</sup> (0.61 in. <sup>3</sup> )	1,92 cm <sup>3</sup> (0.12 in. <sup>3</sup> )	0,83 cm <sup>3</sup> (0.05 in. <sup>3</sup> )	0,64 cm <sup>3</sup> (0.039 in. <sup>3</sup> )
Oil outlet	G <sup>3</sup> / <sub>4</sub>	G <sup>3</sup> / <sub>4</sub>	G <sup>3</sup> / <sub>4</sub>	G <sup>3</sup> / <sub>4</sub>
Length	350 mm (13.9 in.)	350 mm (13.9 in.)	405 mm (16 in.)	405 mm (16 in.)
Height	202 mm (8 in.)	202 mm (8 in.)	202 mm (8 in.)	202 mm (8 in.)
Width	171 mm (6.7 in.)	171 mm (6.7 in.)	171 mm (6.7 in.)	171 mm (6.7 in.)
Weight	11,5 kg (25.3 lb)	11,5 kg (25.3 lb)	13 kg (28.6 lb)	13 kg (28.6 lb)

### Also available as complete set in carrying case

THAP 030E/SET	Consisting of pump, high pressure hose and connecting nipples.
THAP 150E/SET	Consisting of pump, pressure gauge, high pressure hose and connecting nipples.
THAP 300E/SET	Consisting of oil injector, pressure gauge and high pressure pipe.
THAP 400E/SET	Consisting of oil injector, pressure gauge and high pressure pipe.

100 to 400 MPa (14 500 to 58 000 psi)

## SKF Pressure Gauges

SKF Pressure Gauges are designed to fit SKF Hydraulic Pumps and SKF Oil Injectors. The gauges are all liquid filled and/or equipped with a restriction screw in order to absorb any sudden pressure drop thereby preventing damage. Safety glass and blowout discs are standard for all gauges and all have dual scales (MPa/psi).

- Covers pressures of 100 to 400 MPa (14 500 to 58 000 psi)
- Protection against sudden pressure drops
- Safety glass and blow out discs on all gauges
- Stainless steel case
- Dual scales MPa/psi
- Easy to read, high visibility yellow gauge faces



The Digital oil pressure gauge, THGD 100, is used to accurately measure the hydraulic pressure when mounting bearings using the SKF Drive-up Method.



1077587



1077589



1077589/3

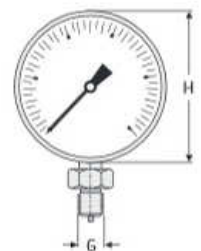


1077587/2

### Technical data

Designation	Pressure range		Diameter (H)		Connection thread	Weight		Accuracy
	MPa	psi	mm	in.		kg	lb	
1077587	0-100	0-14 500	100	3.94	G <sup>1</sup> / <sub>2</sub>	0,80	1.8	1
1077587/2	0-100	0-14 500	63	2.48	G <sup>1</sup> / <sub>4</sub>	0,25	0.6	1,6
THGD 100*	0-100	0-15 000	79	3.10	G <sup>1</sup> / <sub>4</sub>	0,54	1.2	±0,1
1077589	0-300	0-43 500	100	3.94	G <sup>1</sup> / <sub>2</sub>	0,80	1.8	1
1077589/3	0-400	0-58 000	100	3.94	G <sup>1</sup> / <sub>2</sub>	0,80	1.8	1

\* Digital pressure gauge



# Accessories



Maximum working pressure 300 MPa (43 500 psi)

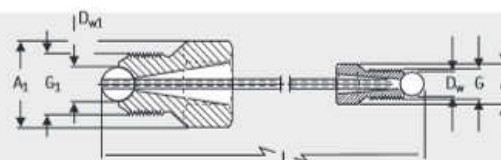
## SKF High-pressure Pipes

The range of SKF High-pressure Pipes covers most applications where there is a requirement to transfer oil at high pressure. They consist of a steel pipe with a steel ball fitted to both ends. Two swivelling connection nipples press these balls against the seating of the connecting hole and seal against oil leakage.

- Wide range of pipes
- All pipes are pressure tested to 100 MPa (14 500 psi) over recommended working pressure
- Special lengths up to 4 000 mm (157 in.) and variants can be made on request

### Technical data

Maximum working pressure	300 MPa (43 500 psi)
Test pressure	400 MPa (58 000 psi)
Test quantity	100%
Outer pipe diameter	4 mm (0.16 in.)
Inner pipe diameter	2 mm (0.08 in.)
Pipe lengths	Between 300 mm (12 in.) and 4 000 mm (157 in.) can be ordered e.g. 227957A/3000 (3 000 mm long)



Designation	G	G <sub>1</sub>	Dimensions						Weight					
			A	A <sub>1</sub>	D <sub>w</sub>	D <sub>w1</sub>	L	kg	lb					
			mm	in.	mm	in.	mm	in.	mm	in.				
721740 A	G <sup>1</sup> / <sub>8</sub>	G <sup>3</sup> / <sub>4</sub>	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*	G <sup>1</sup> / <sub>4</sub>	G <sup>3</sup> / <sub>4</sub>	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*	G <sup>3</sup> / <sub>4</sub>	G <sup>3</sup> / <sub>4</sub>	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**	G <sup>1</sup> / <sub>4</sub>	G <sup>1</sup> / <sub>4</sub>	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	G <sup>1</sup> / <sub>4</sub>	G <sup>1</sup> / <sub>4</sub>	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). Test pressure 500 MPa (72 500 psi) Outer diameter of the pipe 6 mm (0.24 in.).

### Safety note:

For safety reasons, these 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 2021. High pressure pipes are marked with their maximum working pressure e.g. MAX 400 MPa. The pipe colour also indicates the maximum working pressure. Black pipes can be used up to 300 MPa, whilst grey pipes can be used up to 400 MPa.

All flexible pressure hoses are subject to ageing and, after a number of years, the performance deteriorates. All SKF flexible pressure hoses are hard marked with the year in which their life expires, e.g. LIFE EXPIRES 2018.





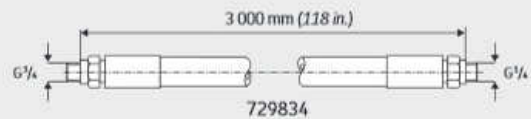
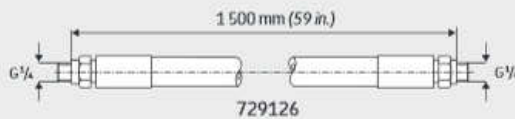
Maximum working pressure up to 150 MPa (21 750 psi)

## SKF Flexible High-pressure Hoses

The SKF flexible pressure hoses are designed to be used together with the quick connect coupling SKF 729831 A and nipple SKF 729832 A on the range of SKF Hydraulic Pumps.

### Technical data

Designation	Bore diameter		Outside diameter		Maximum working pressure		Minimum burst pressure		Minimum bending radius		End fittings	Working temperature		Length		Weight	
	mm	in.	mm	in.	MPa	psi	MPa	psi	mm	in.		°C	°F	mm	in.	kg	lb
729126	4,0	0.16	10	0.39	100	14 500	300	43 500	65	2.6	G <sup>1</sup> / <sub>4</sub>	-30/80	-22/176	1 500	59	0,4	0.9
729834	5,0	0.20	11	0.43	150	21 750	450	65 250	150	5.9	G <sup>1</sup> / <sub>4</sub>	-30/80	-22/176	3 000	118	0,9	2.0



For accurate bearing clearance measurement

## SKF Feeler Gauges 729865 series

As an alternative to the SKF Drive-up method SKF Feeler Gauges can be used to measure the internal clearance when adjusting spherical roller bearings. Two types are available, one with 13 blades of 100 mm (4 in.) length and the other with 29 blades of 200 mm (8 in.) length.

- Highly accurate measurement
- 729865 A is supplied with protective plastic cover
- 729865 B is supplied with protective steel cage



### Technical data

Designation	Blade length		Blade thickness					
	mm	in.	mm	in.	mm	in.	mm	in.
729865 A	100	4.0	0,03	0.0012	0,08	0.0031	0,14	0.0055
			0,04	0.0016	0,09	0.0035	0,15	0.0059
			0,05	0.0020	0,10	0.0039	0,20	0.0079
			0,06	0.0024	0,12	0.0047	0,30	0.0118
			0,07	0.0028				
729865 B	200	8.0	0,05	0.0020	0,18	0.0071	0,60	0.0236
			0,09	0.0035	0,19	0.0075	0,65	0.0256
			0,10	0.0039	0,20	0.0079	0,70	0.0276
			0,11	0.0043	0,25	0.0098	0,75	0.0295
			0,12	0.0047	0,30	0.0118	0,80	0.0315
			0,13	0.0051	0,35	0.0138	0,85	0.0335
			0,14	0.0055	0,40	0.0157	0,90	0.0354
			0,15	0.0059	0,45	0.0177	0,95	0.0374
			0,16	0.0063	0,50	0.0197	1,00	0.0394
			0,17	0.0067	0,55	0.0216		





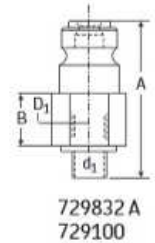
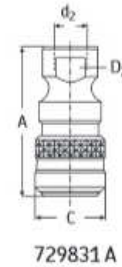
For easy pressure hose connection

## SKF Quick Connecting Coupling and Nipples

One coupling and two different nipples are available to connect SKF Hydraulic Pumps to the work piece. When nipples with other thread types are required, select an additional SKF nipple from the range to make the connection. SKF Nipple 729832 A is supplied standard with all SKF Hydraulic Nuts HMV ..E series.

### Technical data

Designation	Thread	Dimensions						Maximum pressure	
		D <sub>2</sub>		C		A		MPa	psi
<b>Coupling</b>	d <sub>2</sub>	mm in.		mm in.		mm in.			
729831 A	G <sup>1</sup> / <sub>4</sub>	24	0.94	27	1.06	58	2.28	150	21 750
<b>Nipples</b>	d <sub>1</sub>	D <sub>1</sub>		B		A		MPa	psi
		mm in.		mm in.		mm in.			
729832 A	G <sup>1</sup> / <sub>4</sub>	22	0.87	14	0.55	46	1.81	150	21 750
729100	G <sup>1</sup> / <sub>8</sub>	17	0.67	14	0.55	43	1.69	100	14 500



Up to 400 MPa (58 000 psi)

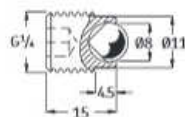
## Plugs for oil ducts and vent holes

SKF plugs have been designed to seal off oil connections at a maximum pressure of 400 MPa (58 000 psi).

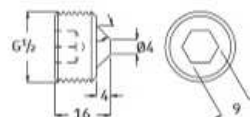
### Technical data

Designation	Thread	Length	
		mm	in.
233950 E	G <sup>1</sup> / <sub>4</sub>	15	0.59
729944 E	G <sup>1</sup> / <sub>2</sub>	17	0.67
1030816 E	G <sup>3</sup> / <sub>4</sub>	23	0.90

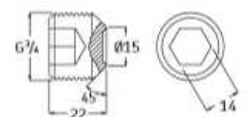
Maximum working pressure 400 MPa (58 000 psi)



Plug 233950 E



Plug 729944 E



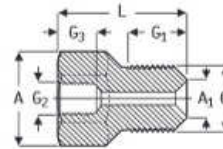
Plug 1030816 E

## SKF Connection Nipples

SKF provides a wide range of connection nipples covering many different thread combinations and sizes. They are used as adapters to enable pipes and hoses to be connected to different thread sizes.



### Technical data – Nipples with metric and G pipe threads



Designation	G		Max. working pressure		Dimensions						Width across flats				
	G	G <sub>2</sub>	Mpa	Psi	A	A <sub>1</sub>	G <sub>1</sub>	G <sub>3</sub>	L						
					mm	in.	mm	in.	mm	in.	mm	in.	mm		
1077456/100MPa	M8	M6	100	14 500	11	0.43	5	0.20	15	0.59	9	0.35	33	1.30	10
1077455/100MPa	G <sup>1</sup> / <sub>8</sub>	M6	100	14 500	11	0.43	7	0.28	15	0.59	9	0.35	33	1.30	10
1014357 A	G <sup>1</sup> / <sub>8</sub>	G <sup>1</sup> / <sub>4</sub>	300	43 500	25,4	1.00	7	0.28	15	0.59	15	0.59	43	1.69	22
1009030 B	G <sup>1</sup> / <sub>8</sub>	G <sup>3</sup> / <sub>8</sub>	300	43 500	25,4	1.00	7	0.28	15	0.59	15	0.59	42	1.65	22
1019950	G <sup>1</sup> / <sub>8</sub>	G <sup>1</sup> / <sub>2</sub>	300	43 500	36,9	1.45	7	0.28	15	0.59	14	0.55	50	1.97	32
1018219 E	G <sup>1</sup> / <sub>4</sub>	G <sup>3</sup> / <sub>8</sub>	400	58 000	25,4	1.00	9,5	0.37	17	0.67	15	0.59	45	1.77	22
1009030 E	G <sup>1</sup> / <sub>4</sub>	G <sup>3</sup> / <sub>4</sub>	400	58 000	36,9	1.45	9,5	0.37	17	0.67	20	0.79	54	2.13	32
1012783 E	G <sup>3</sup> / <sub>8</sub>	G <sup>1</sup> / <sub>4</sub>	400	58 000	25,4	1.00	10	0.39	17	0.67	15	0.59	43	1.96	22
1008593 E	G <sup>3</sup> / <sub>8</sub>	G <sup>3</sup> / <sub>4</sub>	400	58 000	36,9	1.45	10	0.39	17	0.67	20	0.79	53	2.09	32
1016402 E	G <sup>1</sup> / <sub>2</sub>	G <sup>1</sup> / <sub>4</sub>	400	58 000	25,4	1.00	14	0.55	20	0.79	15	0.59	43	1.96	22
729146	G <sup>1</sup> / <sub>2</sub>	G <sup>3</sup> / <sub>4</sub>	300	43 500	36,9	1.45	–	–	17	0.67	20	0.79	50	1.97	32
228027 E	G <sup>3</sup> / <sub>4</sub>	G <sup>1</sup> / <sub>4</sub>	400	58 000	36,9	1.45	15	0.59	22	0.87	15	0.59	50	1.97	32

### Technical data – Nipples with NPT tapered threads

Designation	G		Max. working pressure		Dimensions						Width across flats		
	G	G <sub>2</sub>	Mpa	Psi	A	A <sub>1</sub>	G <sub>1</sub>	G <sub>3</sub>	L				
					mm	in.	mm	in.	mm	in.	mm	in.	mm
729654/150MPa	NPT <sup>1</sup> / <sub>4</sub> "	G <sup>1</sup> / <sub>4</sub>	150	21 750	25,4	1.00	15	0.59	15	0.59	42	1.65	22
729655/150MPa	NPT <sup>3</sup> / <sub>8</sub> "	G <sup>1</sup> / <sub>4</sub>	150	21 750	25,4	1.00	15	0.59	15	0.59	40	1.57	22
729106/100MPa	G <sup>1</sup> / <sub>4</sub>	NPT <sup>3</sup> / <sub>8</sub> "	100	14 500	36,9	1.45	17	0.67	15	0.59	50	1.97	32
729656/150MPa	NPT <sup>3</sup> / <sub>4</sub> "	G <sup>1</sup> / <sub>4</sub>	150	21 750	36,9	1.45	20	0.79	15	0.59	45	1.77	32

Catering for adapter and withdrawal sleeve applications

## SKF Extension Pipes with Connecting Nipples



### M4 extension pipe with connection nipple

Used to extend a high-pressure pipe with a G<sup>1</sup>/<sub>4</sub> nipple (e.g. SKF 227957 A) when the sleeve connection hole has an M4 thread. The extension pipe and connection nipple should be ordered as separate items.

### M6 extension pipe with connection nipple

Used to extend a high-pressure pipe with a G<sup>1</sup>/<sub>4</sub> nipple (e.g. SKF 227957 A) when the sleeve connection hole has a M6 thread. The extension pipe and connection nipple should be ordered as separate items.

### G<sup>3</sup>/<sub>4</sub> extension pipe with connection nipple

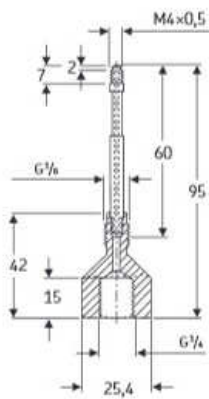
Used to extend a high-pressure pipe with a G<sup>3</sup>/<sub>4</sub> nipple (e.g. SKF 227958 A) when the sleeve connection hole has a G<sup>1</sup>/<sub>4</sub> thread. The extension pipe and connection nipple should be ordered as separate items.

### G<sup>1</sup>/<sub>8</sub> extension pipe

Used to extend a high-pressure pipe with a G<sup>1</sup>/<sub>4</sub> nipple (e.g. SKF 227957 A) when the sleeve connection hole has a G<sup>1</sup>/<sub>8</sub> thread.

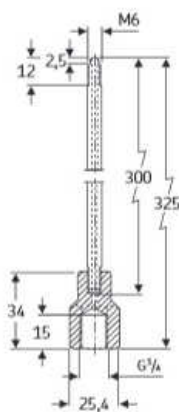
## Technical data

### M4 extension pipe with connection nipple



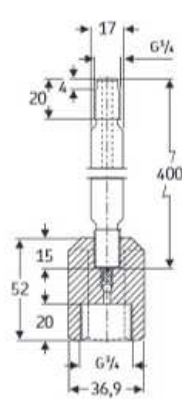
Designation	Max. pressure
pipe 234064	50 MPa (7 250 psi)
nipple 234063	50 MPa (7 250 psi)

### M6 extension pipe with connection nipple



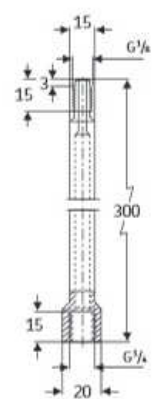
Designation	Max. pressure
pipe 1077453/100MPA	100 MPa (14 500 psi)
nipple 1077454/100MPA	100 MPa (14 500 psi)

### G<sup>1</sup>/<sub>4</sub> extension pipe with connection nipple



Designation	Max. pressure
pipe 227964/100MPA	100 MPa (14 500 psi)
nipple 227963/100MPA	100 MPa (14 500 psi)

### G<sup>1</sup>/<sub>8</sub> extension pipe



Designation	Max. pressure
227965/100MPA	100 MPa (14 500 psi)

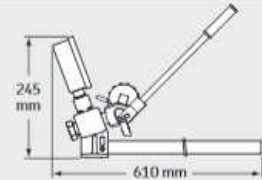


## SKF Adapter Block 226402

The adapter block SKF 226402 consists of a cast steel block to which a pressure gauge and high-pressure pipe can be connected. It comes with a floor support and a 90 degree connection nipple for the oil reservoir.

### Technical data

Designation	226402
Maximum pressure	400 MPa (58 000 psi)
Pressure gauge connection	G <sup>1</sup> / <sub>2</sub>
Pressure pipe connection	G <sup>3</sup> / <sub>4</sub>
Weight	2,55 kg (5.6 lb)



For bearing mounting

## SKF Mounting Fluid LHM 300

SKF Mounting Fluid is suitable for use with SKF hydraulic equipment, including hydraulic pumps, HMV ..E nuts and oil injection tools. SKF LHM 300 contains anti-corrosives which are non-aggressive to seal materials such as nitrile rubber, perbunan, leather and chrome leather, PTFE, and so on.



For bearing dismounting

## SKF Dismounting Fluid LHDF 900

SKF Dismounting Fluid is suitable for use with SKF hydraulic equipment, including hydraulic pumps and oil injection tools. SKF LHDF 900 contains anti-corrosives which are non-aggressive to seal materials such as nitrile rubber, perbunan, leather and chrome leather, PTFE, and so on.

### Technical data

Designation	LHDF 900/pack size	LHM 300/pack size
Specific gravity	0,885	0,882
Flash point	202 °C (395 °F)	200 °C (390 °F)
Pour point	-28 °C (-18 °F)	-30 °C (-22 °F)
Viscosity at 20 °C (68 °F)	910 mm <sup>2</sup> /s	300 mm <sup>2</sup> /s
Viscosity at 40 °C (104 °F)	330 mm <sup>2</sup> /s	116 mm <sup>2</sup> /s
Viscosity at 100 °C (212 °F)	43 mm <sup>2</sup> /s	17,5 mm <sup>2</sup> /s
Viscosity index	180	160
Available pack size	5 and 205 litre	1, 5, 205 litre

# Also available from SKF



## Mounting bearings made easy

### SKF Adapter and withdrawal sleeves for oil injection

These SKF sleeves facilitate the use of the SKF Oil Injection Method.

The larger sleeves have oil supply ducts and distribution grooves, enabling the user to inject oil between the sleeve and bearing bore and between the sleeve and the shaft. This oil reduces friction and force necessary for mounting, particularly when mounting in a dry state.

- Reduces the risk of damage to shaft and sleeve
- Reduces time to mount and dismount bearings
- A full range of pumps, nipples and pipes are available
- SKF sleeves also help make bearing dismounting easier

For more information, please refer to the SKF General Catalogue, the SKF Maintenance Handbook or consult an SKF application engineer.



## The tool to monitor the mounting of SensorMount bearings

### SensorMount indicator TMEM 1500

The SKF TMEM 1500 provides a direct reading of the fit of a "SensorMount" bearing mounted on a tapered seating.

The TMEM 1500 is only compatible with SKF bearings, which are fitted with the SensorMount sensor. These bearings from SKF have the designation suffixes ZE, ZEB, or ZEV, e.g. ZE 241/500 ECAK30/W33. The SensorMount Indicator provides a numeric value, which guides the user in achieving a reliable bearing fit. SKF bearings fitted with the SensorMount system can also be mounted on adapter sleeves, withdrawal sleeves and hollow shafts. The material composition of the shaft has no effect on the proper operation of the SensorMount system.



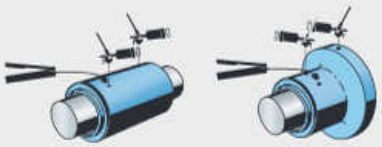
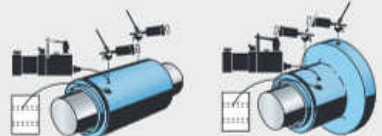
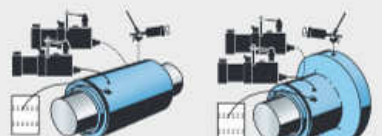

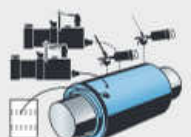
What you see is what you get; directly indicates the real reduction in internal bearing clearance.

- Easy to use
- Fast
- Reliable
- Simplifies the mounting process:
  - No calculations needed
  - Makes feeler gauges obsolete
  - Minimises the risk of human errors

#### Technical data

Designation	TMEM 1500
Range of measurement	0 to 1,500 $\mu$ m
Power supply	9 V alkaline battery, type IEC 6LR61
Battery life	8 hours, continuous use
Display	4-digit LCD with fixed decimal
Operating temperature range	-10 to +50 °C (14 to 122 °F)
Accuracy	±1%, ±2 digits
IP rating	IP 40
Weight	250 g (8.75 oz.)
Size	157 × 84 × 30 mm (6.1 × 3.3 × 1.8 in.)

# OK Coupling mounting and dismounting kits

Coupling size	Designation	Contents	Weight	Application
OKC 45–OKC 90	TMHK 35	1 × 226400 E Injector with spares 1 × 226402 Adapter block 1 × 228027 E Nipple 1 × 729944 E Plug 1 × 227958A Pressure pipe (for OKC 80 and 90) 1 × 728017A/2000 Pressure pipe (for OKC 45–75) Tools and storage case	12 kg (26.5 lb)	
OKC 100–OKC 170 OKCS 178–OKCS 360	TMHK 36	1 × 226400 E Injector with spares 1 × TMJL 50 Hydraulic pump Tools and storage case	19 kg (41.8 lb)	
OKC 180–OKC 250 OKF 100–OKF 300	TMHK 37	2 × 226400 E Injector with spares 1 × 226402* Adapter block 1 × 227958A* High pressure pipe 1 × TMJL 50 Hydraulic pump Tools and storage case	28,1 kg (61.8 lb)	 OKC                      OKF
* = for use with OKF couplings				
OKC 180–OKC 490 OKF 300–OKF 700 Shipboard or infrequent use	TMHK 38	1 × THAP 030E/SET Air-driven pump set 1 × 729147A Return hose 2 × 226400 E Injector with spares	36 kg (79.5 lb)	 OKC                      OKF
OKC 180–OKC 490 OKF 300–OKF 700 Shipyard or frequent use	TMHK 38S	1 × THAP 030E/SET Air-driven pump set 1 × 729147A Return hose 1 × THAP 300E Air-driven oil injector 1 × 226400 E Injector with spares	81,7 kg (180 lb)	 OKC                      OKF
OKC 500–OKC 600 Shipboard or infrequent use	TMHK 39	1 × THAP 030E/SET Air-driven pump 1 × 729147A Return hose 3 × 226400 E Injector with spares	38,6 kg (85 lb)	
OKC 500 and larger Shipboard or infrequent use	TMHK 40	1 × THAP 030E/SET Air-driven pump 1 × THAP 300E Air-driven pump 1 × 729147A Return hose 2 × 226400 E Injector with spares	84 kg (185 lb)	
OKC 500 and larger Shipyard or frequent use	TMHK 41	1 × THAP 030E/SET Air-driven pump 3 × THAP 300E Air-driven oil injector 1 × 729147A Return hose	136 kg (300 lb)	