

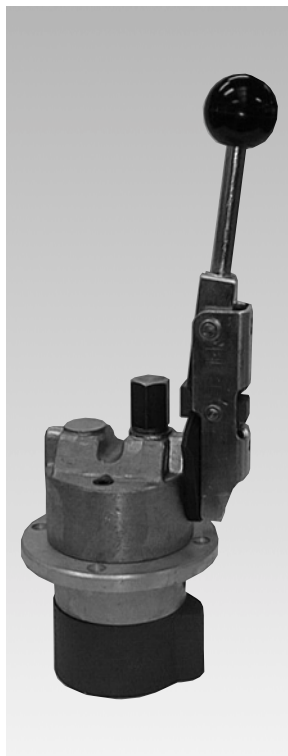
RE 64 558/03.00

Replaces: 04.99



Hydraulic remote controls

Type TH7



Type 2TH7N



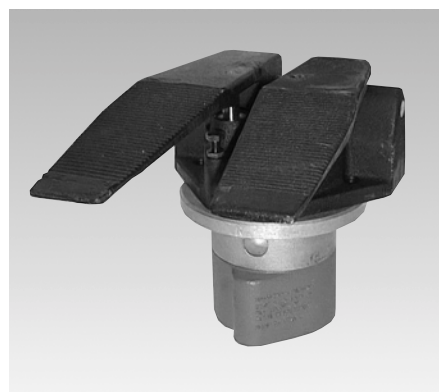
Type 4TH7G



Type 1TH7QL



Type 1TH7Z



Type 2TH7Q

Overview of contents

Description

	Page
Features	1
Functional description, symbol	2
Technical data	2
Ordering details	3
Variants	5
Unit dimensions	4 to 7
Characteristic curves	8 to 9
Notes	10

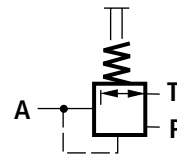
Features

- Progressive, sensitive operation
- Precise and play-free control

Functional description, symbol

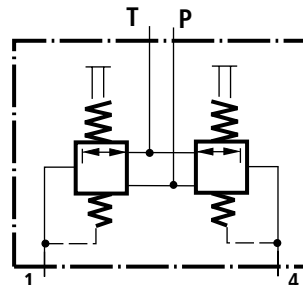
1TH7QL: Single acting hydraulic remote control, operation via one long pedal

1TH7Z: Single acting hydraulic remote control without operator

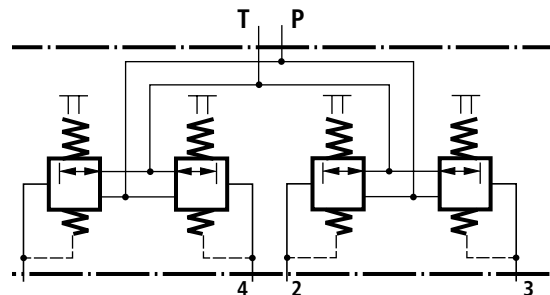


2TH7Q: Single acting hydraulic remote control, operation via two independent pedals

2TH7L, M, N, P: Double acting hydraulic remote control, operation via one side lever



4TH7G, H, J, K: Double acting hydraulic remote control, operation via two side levers



Technical data, mechanical (for applications outside these parameters, please consult us)

Inlet pressure	bar	50
Back pressure at port T	bar	3
Pilot oil flow	L/min	Up to 20
Hysteresis	bar	Up to 1
Pressure fluid		Mineral oil (HL, HLP) to DIN 51524 Phosphate ester (HFD-R)
Pressure fluid temperature range	°C	-20 to +80
Viscosity range	mm²/s	10 to 380
Degree of pressure fluid contamination		Max. permissible degree of contamination of the pressure fluid is to NAS 1638 class 9. We, therefore, recommend a filter with a minimum retention rate of $\beta_{10} \geq 75$
Max. permissible actuation moment at the pedals	Nm	20
Max. permissible actuation force at the plunger	N	88
Max. permissible actuation moment at the levers	Nm	8
Weight	kg	3.2 (1TH7QL, 2TH7L, M, N, P)
	kg	1.2 (1TH7Z)
	kg	6.2 (2TH7Q)
	kg	3.5 (4TH7G, H, J, K)

Ordering details

		- 1X /			
1 control port:					SO.008 = Sea water resistant (only 2TH7L, 2TH7M, 4TH7G, 4TH7H) SO.198 = Plunger grommet (only 1TH7Z)
• Long pedal	= 1TH7QL				
• Without operator	= 1TH7Z				
2 control ports:					Threaded ports 01 = G1/4 Pipe thread to ISO 1179 05 = 9/16 - 18 UNF 2 B UNF connection to ISO 11926
• 2 independent pedals	= 2TH7Q				
• 1 side lever, with spring return	= 2TH7L				
• 1 side lever, with spring return and detents in 3 positions	= 2TH7M				
• 1 side lever, with spring return, lockable in any position and release	= 2TH7N				
• 1 side lever, with spring return and can be fixed in any position by a friction clutch	= 2TH7P				
4 control ports:					Seals M = NBR seals  Attention! The compatibility of the seals and pressure fluid has to be taken into account
• 2 side levers, with spring return	= 4TH7G				
• 2 side levers, with spring return and detents in 3 positions	= 4TH7H				
• 2 side levers, with spring return, lockable in any position and release	= 4TH7J				
• 2 side levers, with spring return and can be fixed in any position by a friction clutch	= 4TH7K				
				1X =	Series 10 to 19 Unchanged installation and connection dimensions (10 to 19)
				05, 06, 73, 91, 93 =	Control curve

Application guidelines (these guidelines are not intended to be considered as complete)

- Do not direct the jet of a pressure washing unit directly at the unit
- Replace worn rubber grommets

Safety guidelines (these guidelines are not intended to be considered as complete)

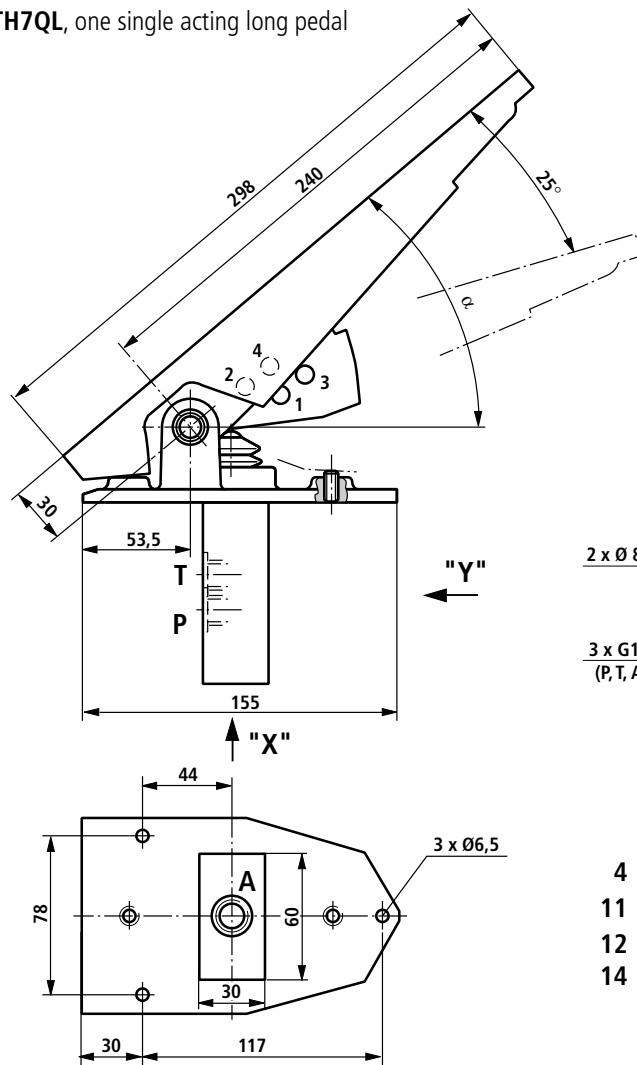
- Take into account all of the application limits, particularly those application limits stated within this catalogue sheet!

Installation guidelines

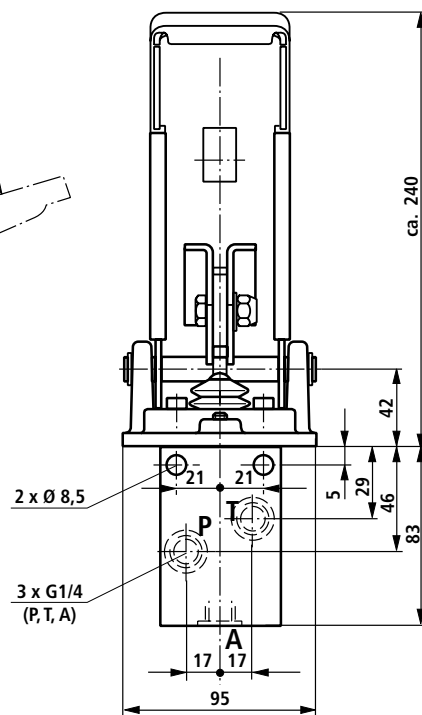
- Mounting flange area: flatness = 0.5 mm
- Screw head dimensions = $\varnothing 10$ mm
- Tightening torque for the flange fixing screws = 10 Nm max.
- Tightening torque for the pipe connections = 30 Nm max.

Unit dimensions (dimensions in mm)

Type 1TH7QL, one single acting long pedal



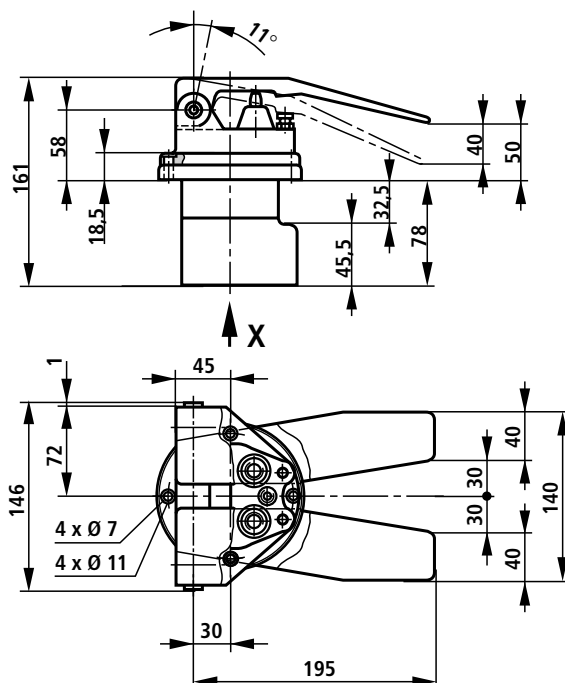
View Y



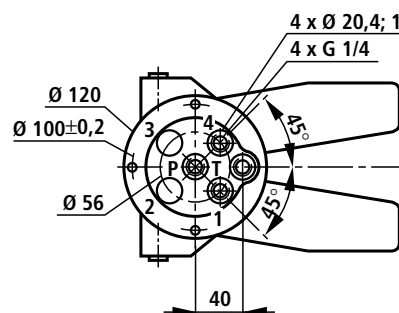
- 4 Fixing holes
- 11 Pedal movement
- 12 Setting screw
- 14 Anti-slip pedal surface

- 15 Adjustable angle approx. every 5°:
- Hole α
- 1 25°
- 2 30°
- 3 35°
- 4 40°

Type 2TH7Q, 2 independent single acting pedals



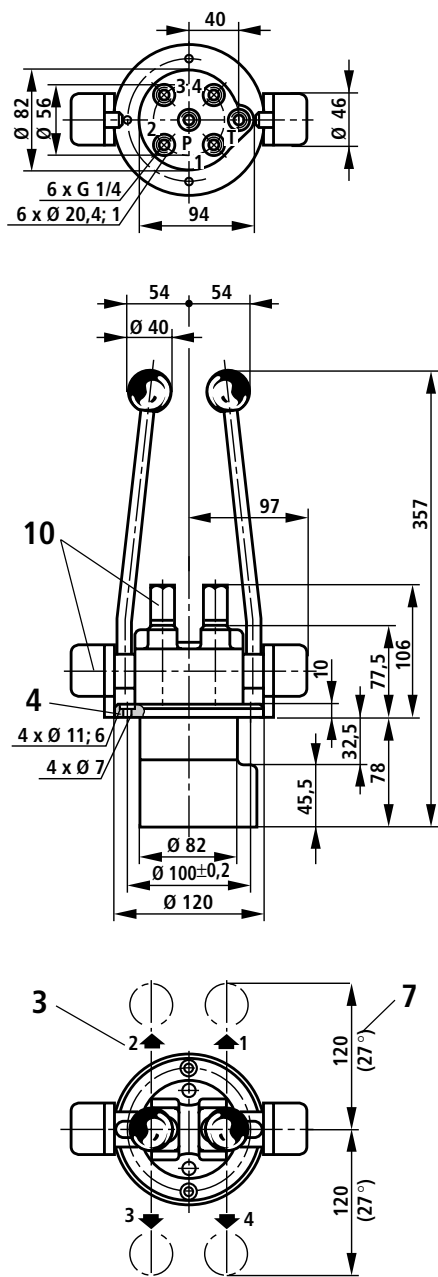
View X



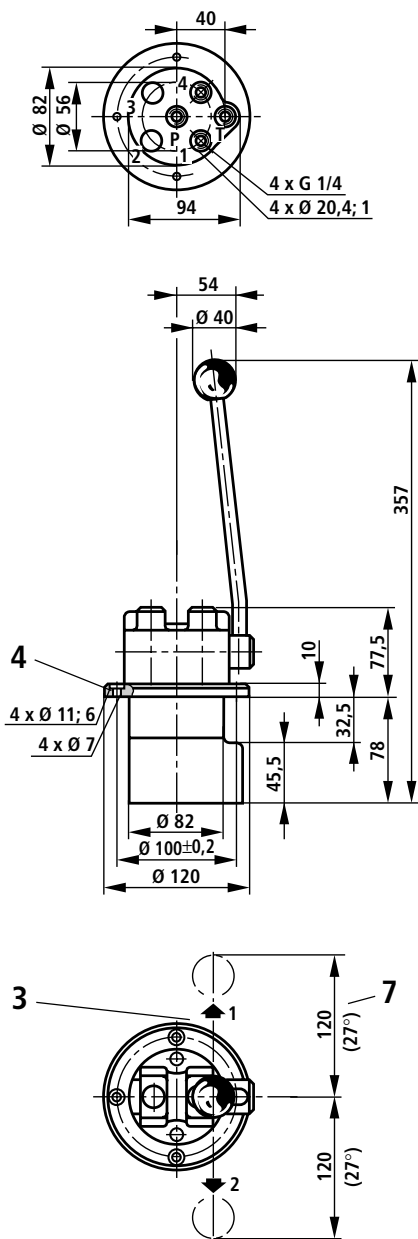
- 4 Fixing holes
- 11 Pedal movement
- 12 Setting screw

Unit dimensions (dimensions in mm)

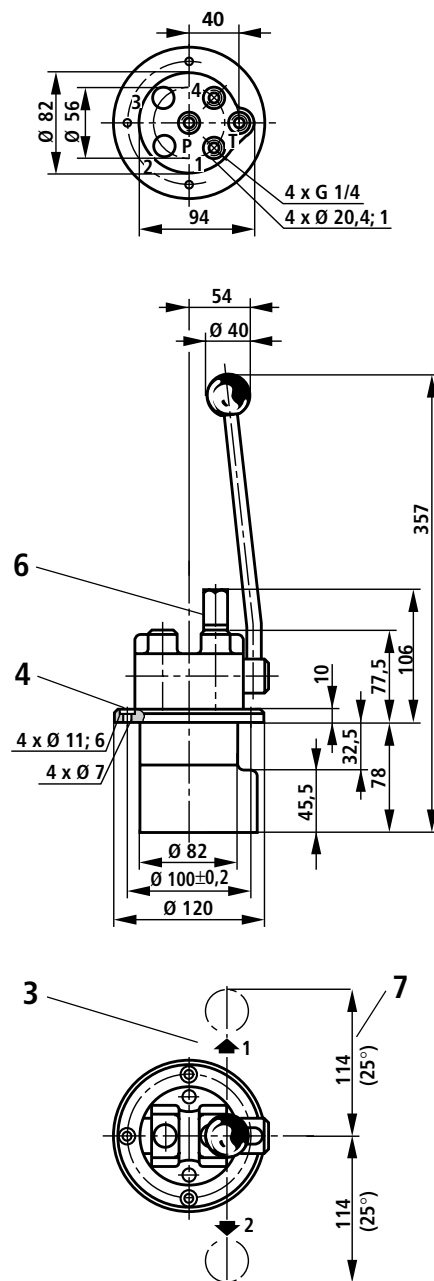
Type K 2 side levers,
spring return,
can be fixed in any position
by friction clutch



Type L 1 side lever,
spring return



Type M 1 side lever,
spring return,
detents in 3 positions



3 Lever operation direction and control ports thereby influenced

7 Lever deflection

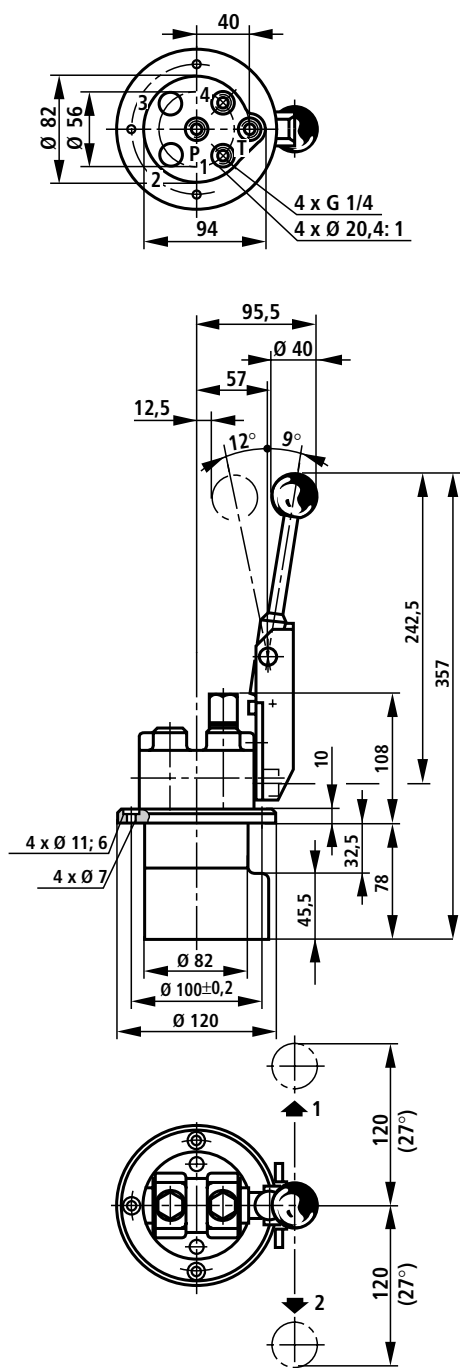
4 Fixing holes

10 Fixed in any position by friction clutch

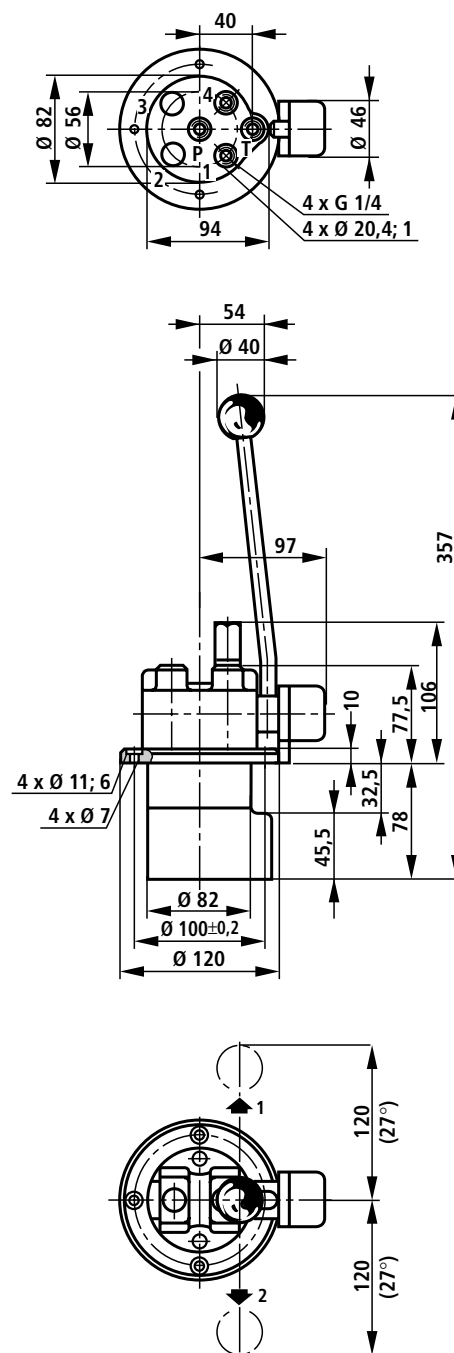
6 Detents in 3 positions (type M)

Unit dimensions (Dimensions in mm)

Type N 1 side lever, spring return, with lock and release in any position



Type P 1 side lever, spring return, can be fixed in any position by friction clutch

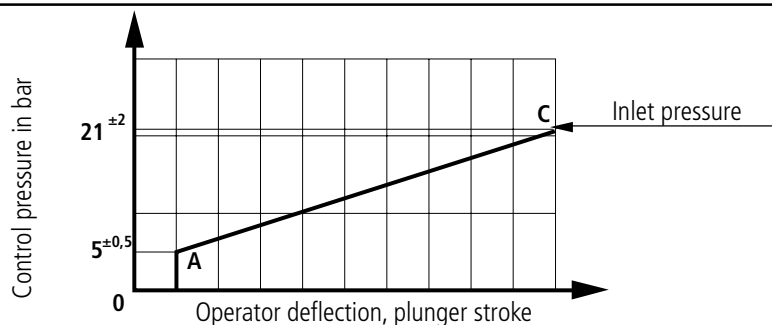


- 3 Lever operation direction and control ports thereby influenced
- 4 Fixing holes
- 7 Lever deflection

- 8 Lever position locked
- 9 Lever position released
- 10 Fixed in any position by friction clutch

Characteristic curves: control ranges, actuation moments

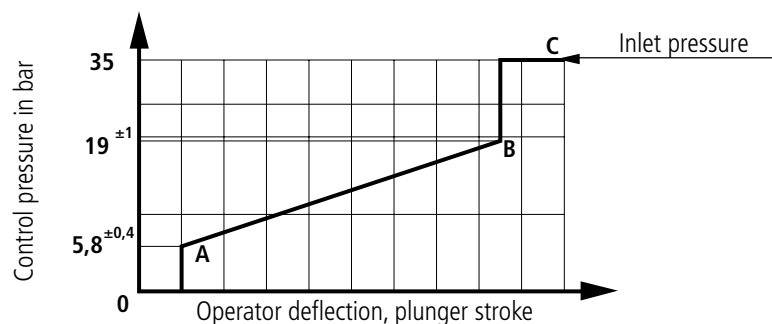
05 Control curve, identification no. 05



	1TH7QL			1TH7Z			2TH7Q			TH7 G/H/J/L/M/N			TH7 K/P		
Intersection point	A		C	A		C	A		C	A		C	A		C
Operator deflection (°)	4°55'		26°10'				1°50'		10°40'	4°40'		27°30'	4°40'		27°30'
Plunger stroke (mm)				1.6		9.2									
Actuation moment (Nm)	0.82		2.38				2.33		6.72	1.95		3.57			
Actuation force (N)				5.49		13.57									

06 Control curve, identification no. 06

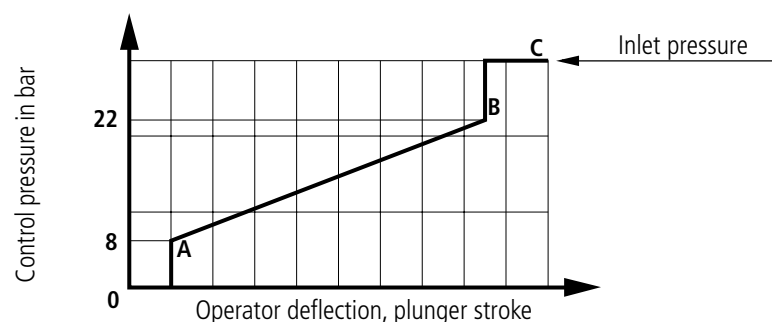
This curve is used for the pilot control of the SM12, SM18, M1 control blocks



	1TH7QL			1TH7Z			2TH7Q			TH7 G/H/J/L/M/N			TH7 K/P		
Intersection point	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Operator deflection (°)	4°55'	20°30'	26°10'				1°50'	8°10'	10°40'	4°40'	21°20'	27°30'	4°40'	21°20'	27°30'
Plunger stroke (mm)				1.6	7.1	9.2									
Actuation moment (Nm)	0.86	2.29	2.66				2.42	6.48	7.53	1.17	3.33	3.63			
Actuation force (N)				6.57	12.80	18.96									

73 Control curve, identification no. 73

This curve is used for the pilot control of the SP12 control blocks

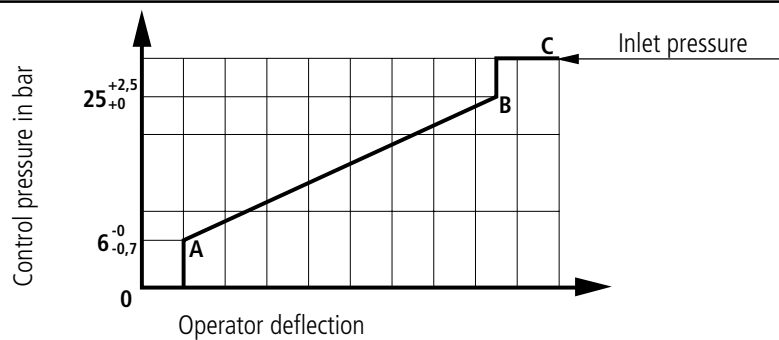


	1TH7QL			1TH7Z			2TH7Q			TH7 G/H/J/L/M/N			TH7 K/P		
Intersection point	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Operator deflection (°)	4°55'	20°30'	26°10'				1°50'	8°10'	10°40'	4°40'	21°20'	27°30'	4°40'	21°20'	27°30'
Plunger stroke (mm)				1.6	7.1	9.2									
Actuation moment (Nm)	0.94	2.29	2.66				2.67	6.48	7.53	1.29	3.13	3.63			
Actuation force (N)				8.57	13.96	18.96									

Characteristic curves: control ranges, actuation moments

91 Control curve, identification no. 91

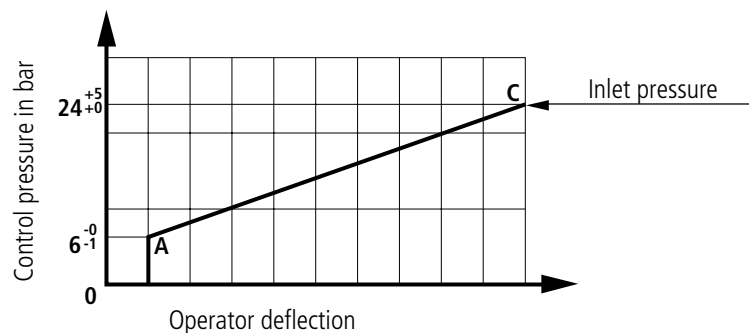
this curve is used for the pilot control of the SX12, SX14, SX18 control blocks



	1TH7QL			1TH7Z			2TH7Q			TH7 G/H/J/L/M/N			TH7 K/P		
Intersection point	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Operator deflection (°)	4°55'	20°30'	26°10'				1°50'	8°10'	10°40'	4°40'	21°20'	27°30'	4°40'	21°20'	27°30'
Plunger stroke (mm)				1.6	7.1	9.2									
Actuation moment (Nm)	0.86	2.29	2.66				2.44	6.48	7.53	1.18	3.13	3.63			
Actuation force (N)				7.79	15.11	18.96									

93 Control curve, identification no. 93

This curve is used for the pilot control of the M7, M4 control blocks



	1TH7QL			1TH7Z			2TH7Q			TH7 G/H/J/L/M/N			TH7 K/P		
Intersection point	A		C	A		C	A		C	A		C	A		C
Operator deflection (°)	4°55'		26°10'				1°50'		10°40'	4°40'		27°30'	4°40'		27°30'
Plunger stroke (mm)				1.6		9.2									
Actuation moment (Nm)	2.44		6.72				1.18		3.25	0.86		2.74			
Actuation force (N)				7.79		14.73									

Notes

Mannesmann Rexroth AG
Rexroth Hydraulics

D-97813 Lohr am Main
Jahnstraße 3-5 • D-97816 Lohr am Main
Telefon 0 93 52 / 18-0
Telefax 0 93 52 / 18-23 58 • Telex 6 89 418-0
E-Mail product.support@rexroth.de
Internet www.rexroth.com

Mannesmann Rexroth S.A.
Division Sigma International

BP 101 - 91, bd Irène Joliot-Curie
F-69634 • Vénissieux cedex - France
Tél. 04 78 78 52 52
Fax. 04 78 78 52 26 • Télex 380 852
Internet www.mannesmann-rexroth.fr

The specified data is for product description purposes only and may not be deemed to be guaranteed unless expressly confirmed in the contract.