Quality through Competence

CATALOGUE NO. 14 J 001

Cylinder 3PL
Grapichs

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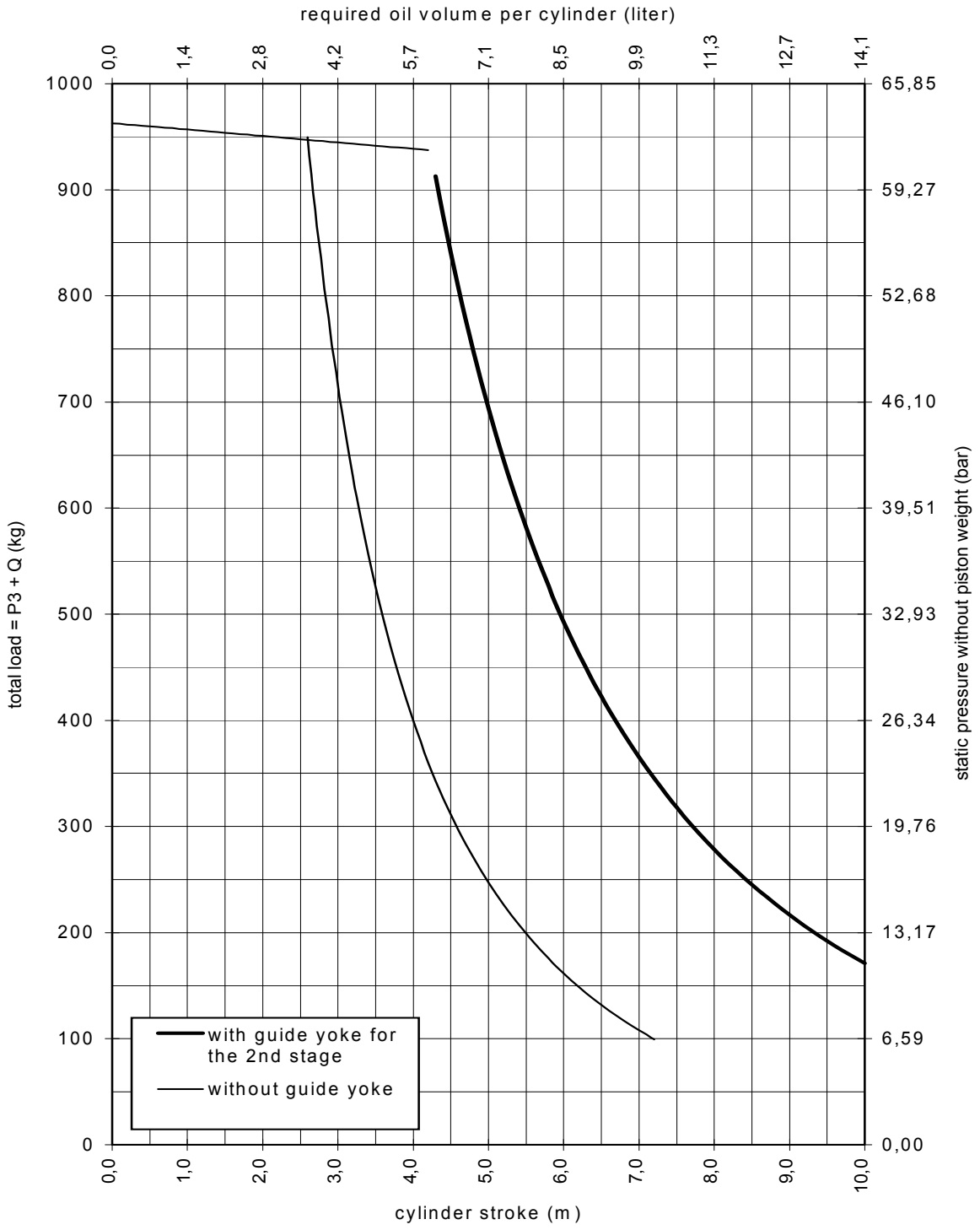
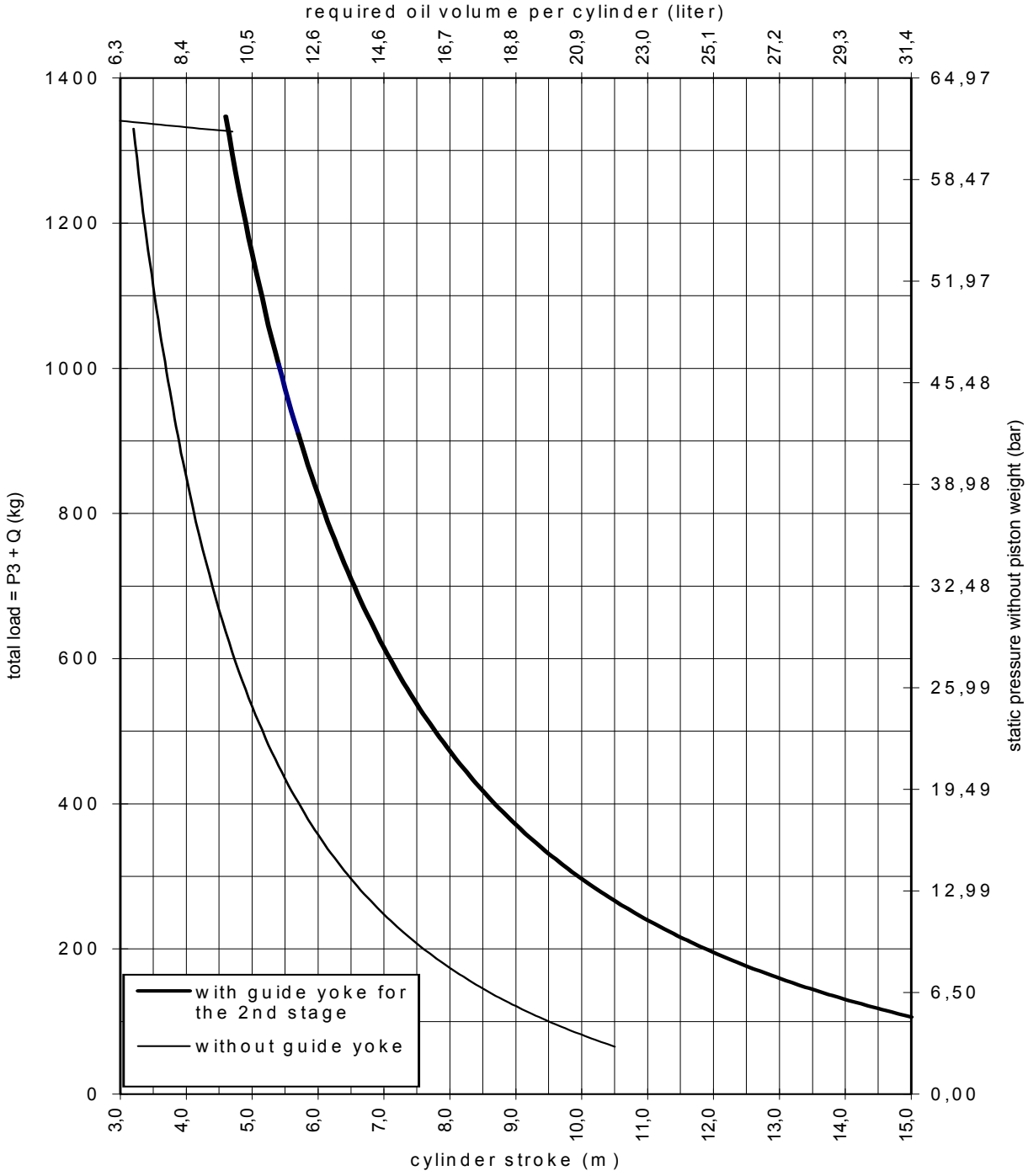
Selection diagram for Telescopic 2-stage Cylinder
Acc. to EN 81/2 - Central Direct System
Type 3PL 35/2 - VE



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 35 / 50 (mm)	Factor of excess pressure = 1,4
reference area	A = 14,897 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 11,244 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	6,045 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - Central Direct System	emesso	S. A.	20/11/1998
		controllato		02/07/2002
		nullaosta		
Sost. il 2PX0270a Sost. da	DOCUMENTAZIONI TECNICHE	2PX0270b		pag 1 di 11

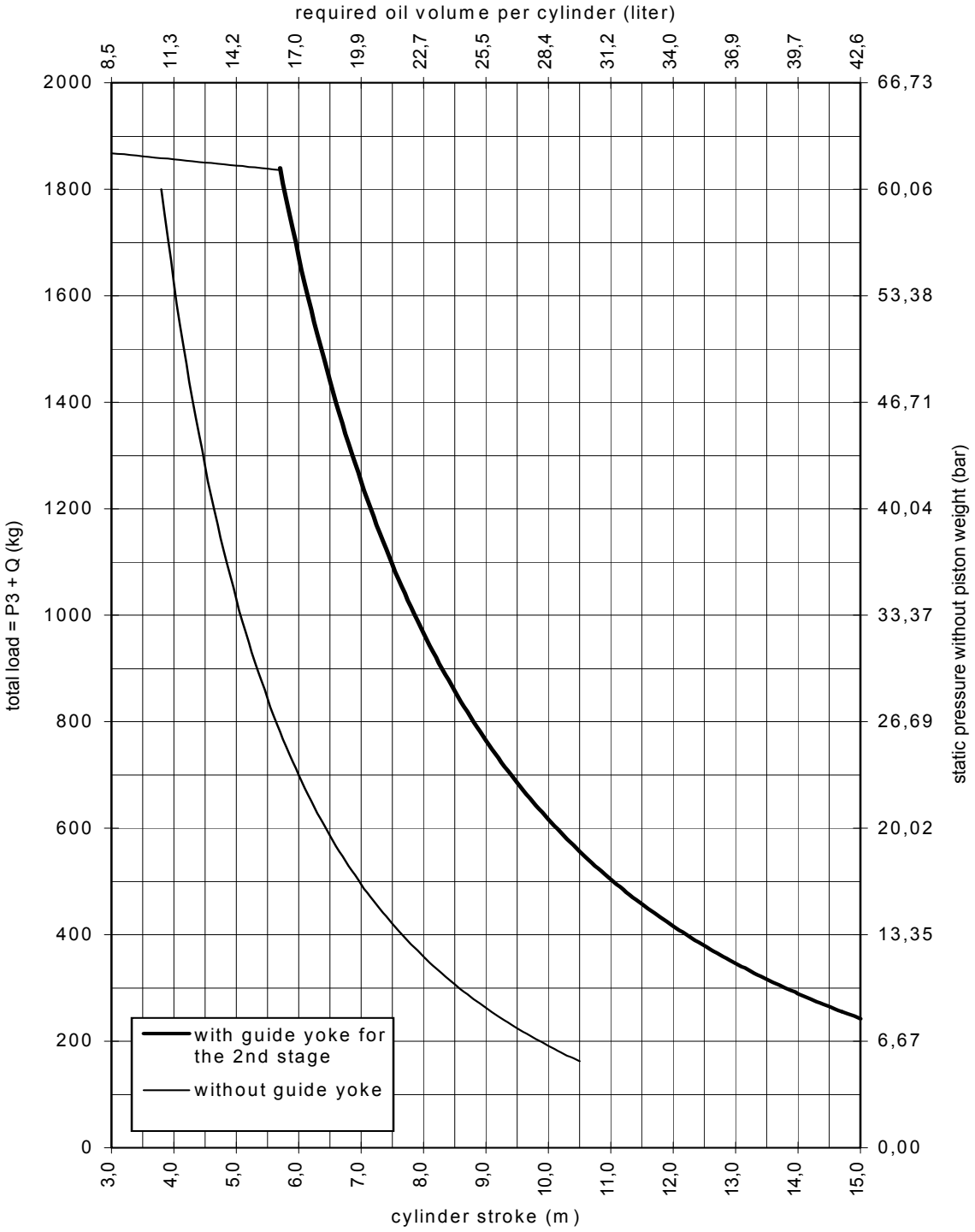
Selection diagram for Telescopic 2-stage Cylinder
Acc. to EN 81/2 - Central Direct System
Type 3PL 42/2 - VE



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 42 / 60 (mm)	Factor of excess pressure = 1,4
reference area	A = 21,138 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 14.37 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	8,8 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - Central Direct System	emesso	S. A.	20/11/1998
		controllato		02/07/2002
		nullaosta		
Sost. il 2PX0270a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 0 b	pag di	2 11

Selection diagram for Telescopic 2-stage Cylinder
Acc. to EN 81/2 - Central Direct System
Type 3PL 50/2 - VE



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 50 / 70 (mm)	Factor of excess pressure = 1,4
reference area	A = 29,402 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 19,411 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	11,714 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - Central Direct System	emesso	S. A.	20/11/1998
		controllato		02/07/2002
		nullaosta		
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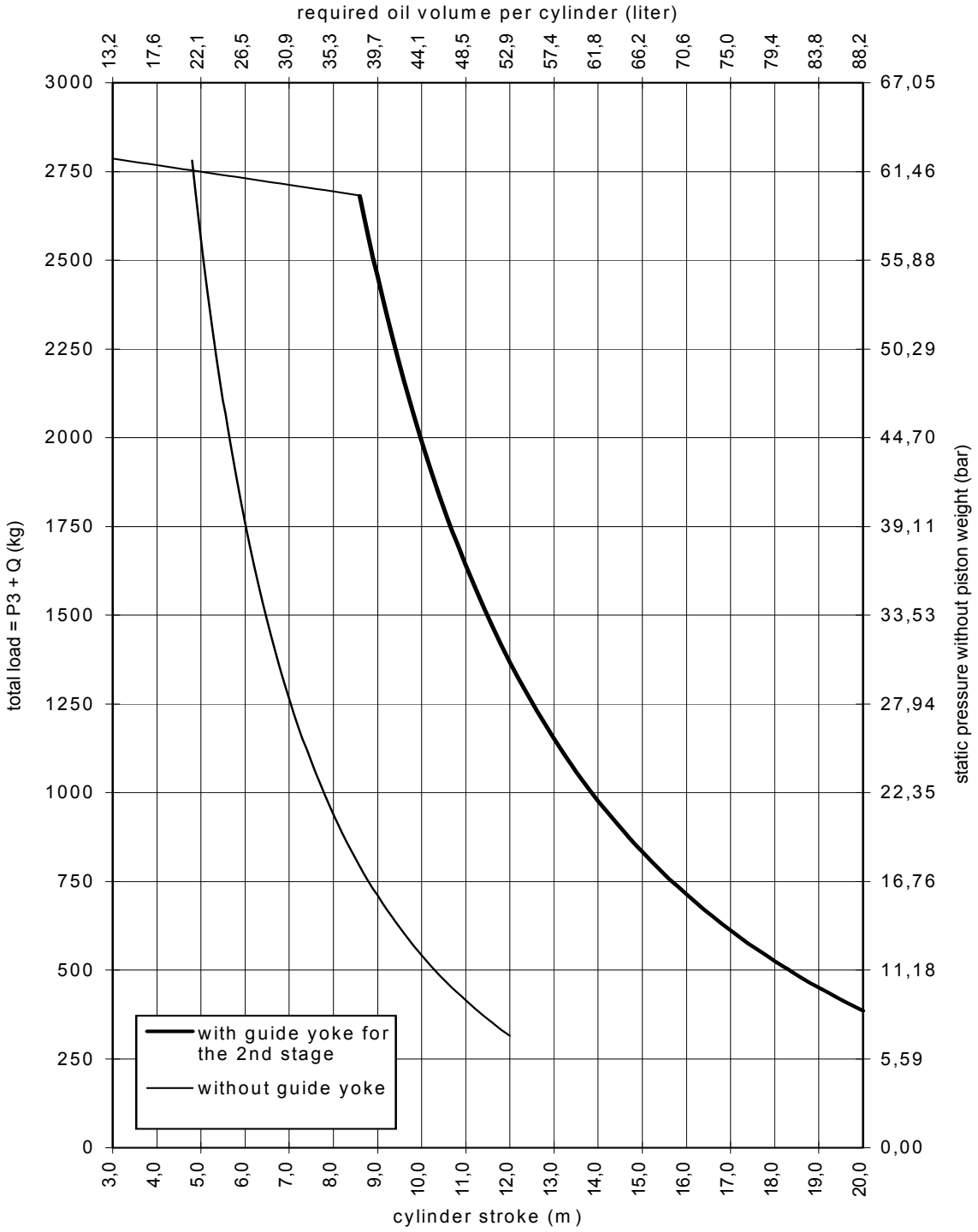
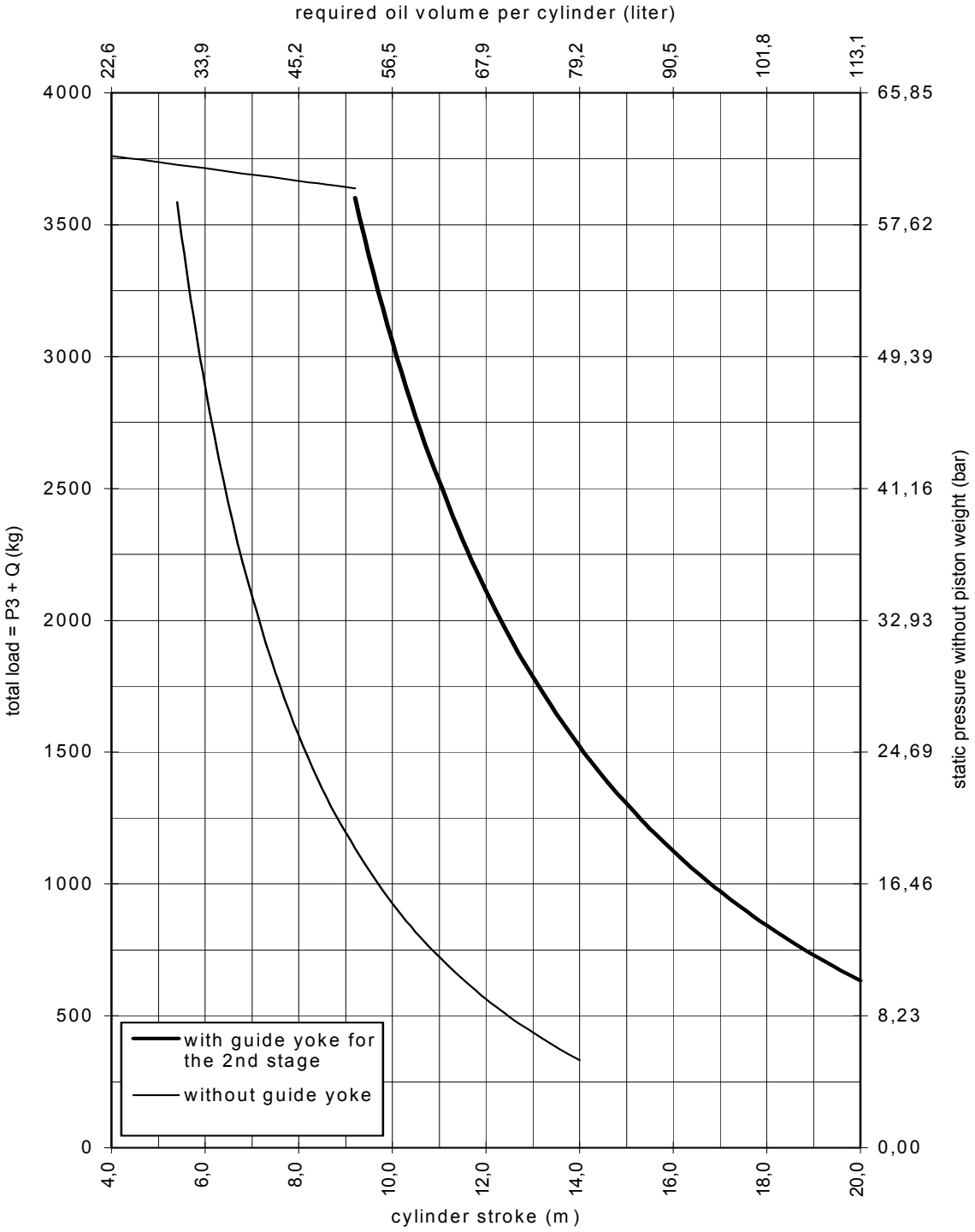
Selection diagram for Telescopic 2-stage Cylinder
Acc. to EN 81/2 - Central Direct System
Type 3PL 63/2 - VE



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 63 / 85 (mm)	Factor of excess pressure = 1,4
reference area	A = 43,891 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 27,602 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	18,527 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - Central Direct System	emesso	S. A.	20/11/1998	
		controllato		02/07/2002	
		nullaosta			
Sost. il 2PX0270a Sost. da	DOCUMENTAZIONI TECNICHE	2PX0270b		pag 4 di 11	

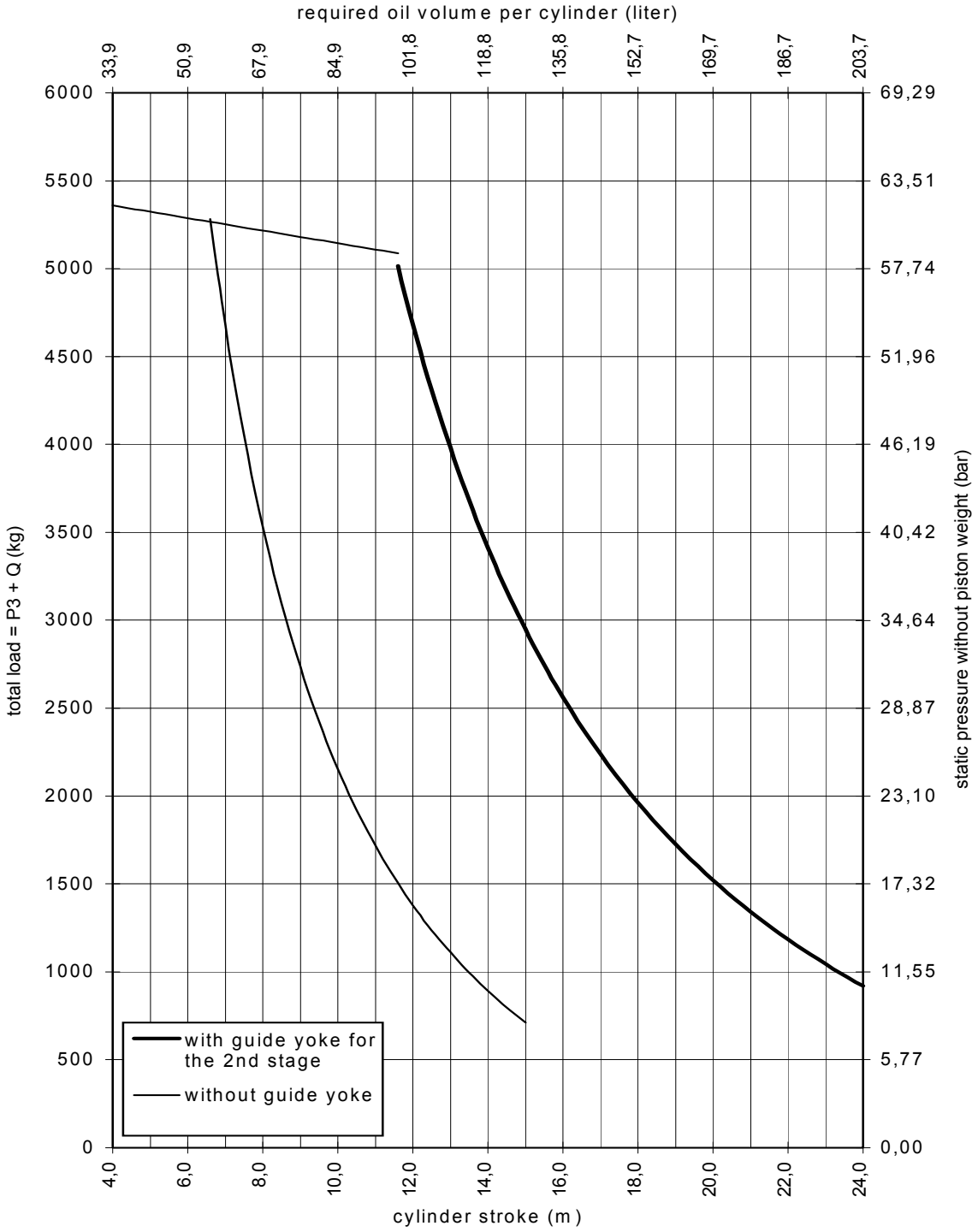
Selection diagram for Telescopic 2-stage Cylinder
Acc. to EN 81/2 - Central Direct System
Type 3PL 70/2 - VE



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 70 / 100 (mm)	Factor of excess pressure = 1,4
reference area	A = 59,589 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 40,184 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	23,659 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - Central Direct System	emesso	S. A.	20/11/1998	
		controllato		02/07/2002	
		nullaosta			
Sost. il 2PX0270a Sost. da	DOCUMENTAZIONI TECNICHE	2PX0270b		pag 5 di 11	

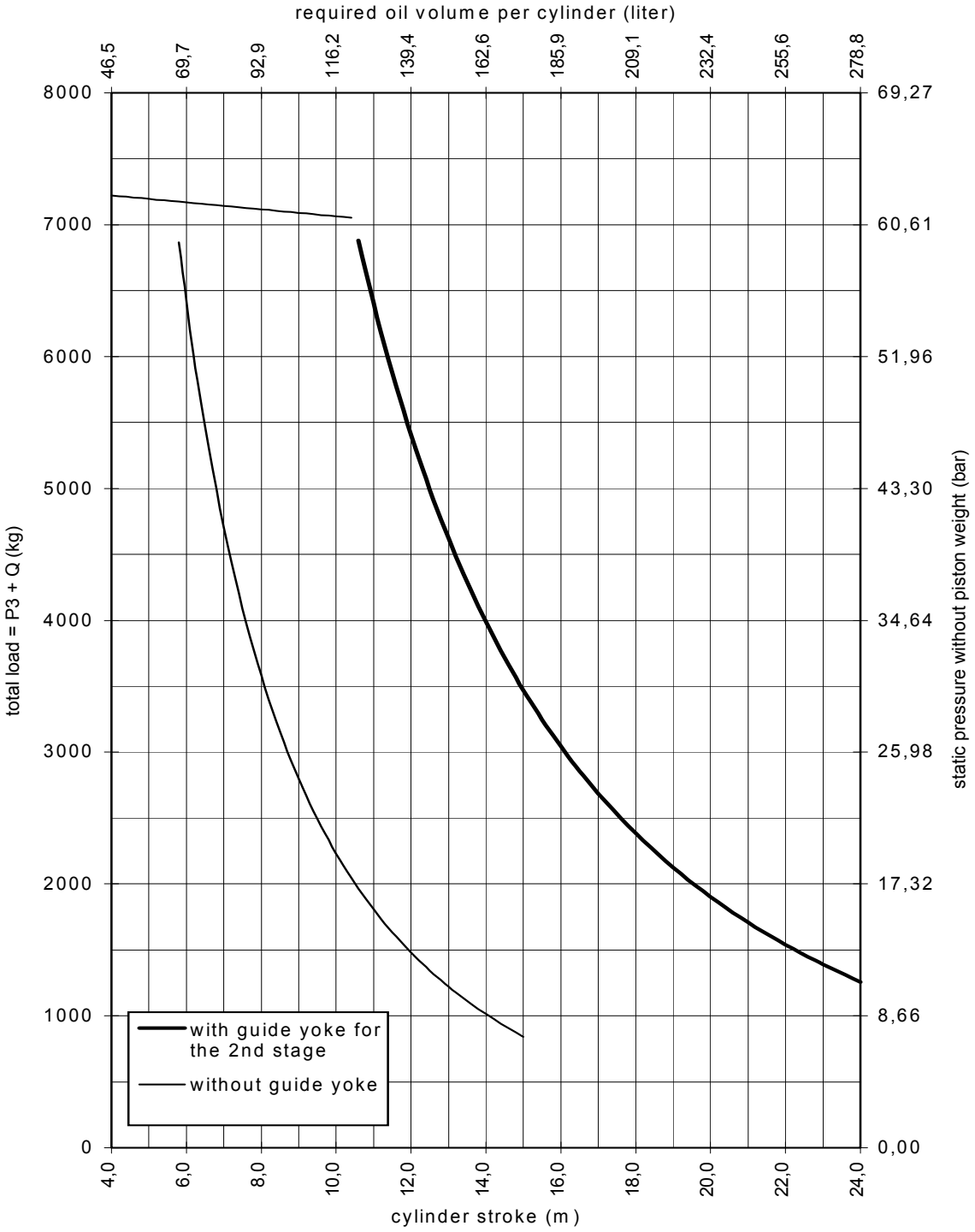
Selection diagram for Telescopic 2-stage Cylinder
Acc. to EN 81/2 - Central Direct System
Type 3PL 85/2 - VE



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 85 / 120 (mm)	Factor of excess pressure = 1,4
reference area	A = 84,952 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 51,451 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	35,836 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - Central Direct System	emesso	S. A.	20/11/1998	
		controllato		02/07/2002	
		nullaosta			
Sost. il 2PX0270a Sost. da	DOCUMENTAZIONI TECNICHE	2PX0270b		pag 6 di 11	

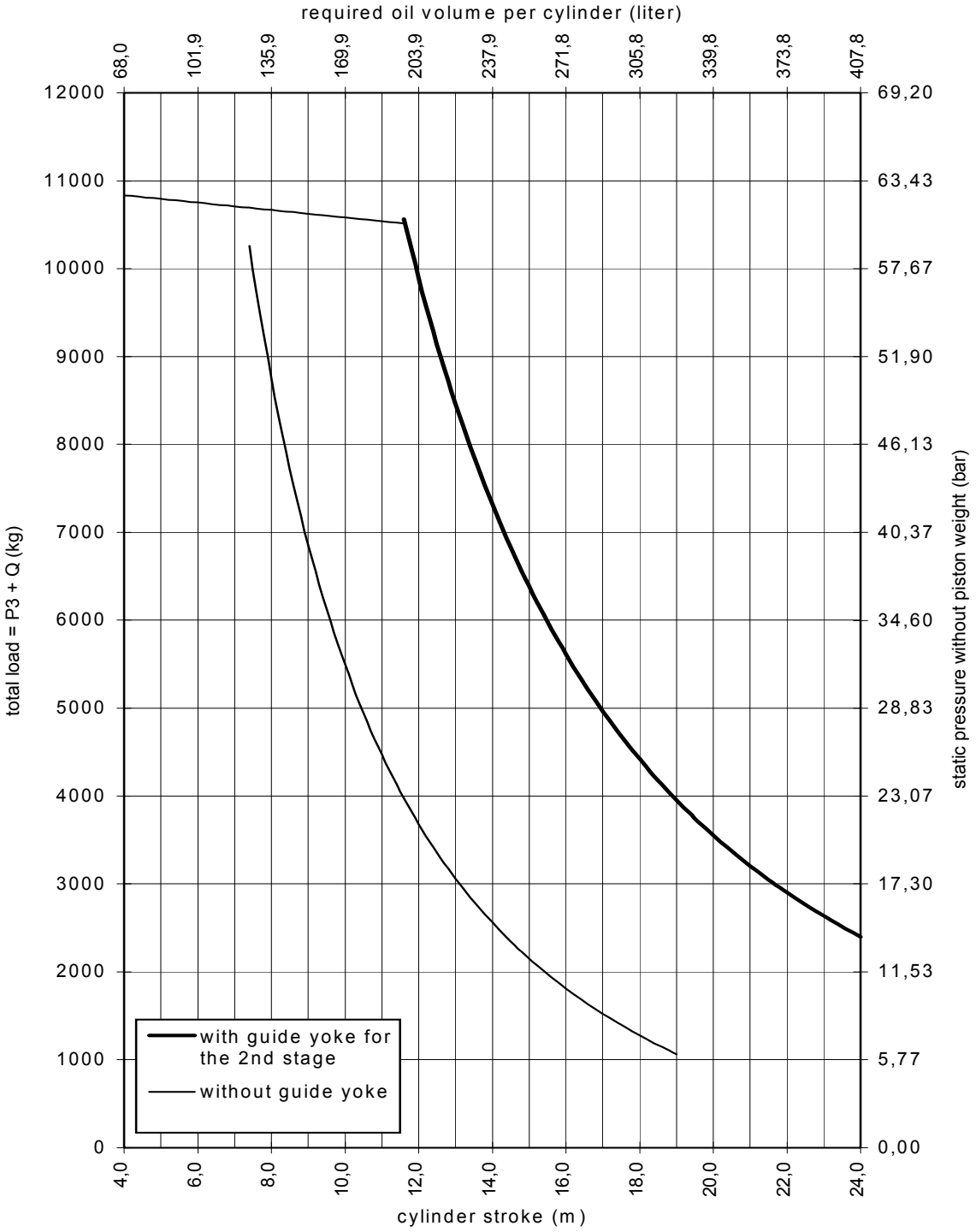
Selection diagram for Telescopic 2-stage Cylinder
Acc. to EN 81/2 - Central Direct System
Type 3PL 100/2 - VE



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 100 / 140 (mm)	Factor of excess pressure = 1,4
reference area	A = 116,269 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 70,812 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	27,128 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - Central Direct System	emesso	S. A.	20/11/1998
		controllato		02/07/2002
		nullaosta		
Sost. il 2PX0270a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 0 b		pag 7 di 11

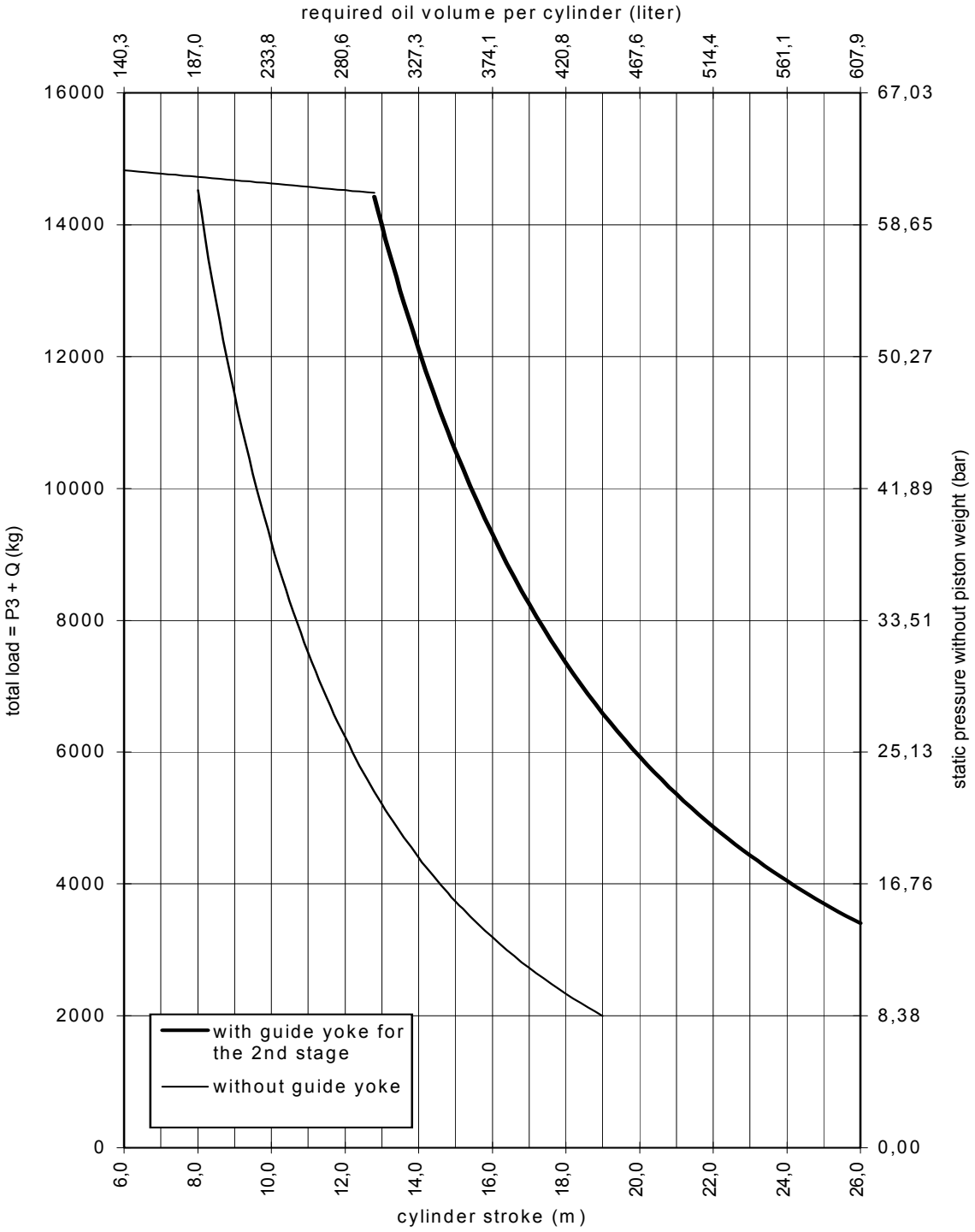
Selection diagram for Telescopic 2-stage Cylinder
Acc. to EN 81/2 - Central Direct System
Type 3PL 120/2 - VE



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 120 / 170 (mm)	Factor of excess pressure = 1,4
reference area	A = 170,110 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 100,705 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	42,233 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - Central Direct System	emesso	S. A.	20/11/1998	
		controllato		02/07/2002	
		nullaosta			
Sost. il 2PX0270a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 0 b		pag 8 di 11	

Selection diagram for Telescopic 2-stage Cylinder
Acc. to EN 81/2 - Central Direct System
Type 3PL 140/2 - VE



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 140 / 200 (mm)	Factor of excess pressure = 1,4
reference area	A = 234,180 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 159,651 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	50,248 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - Central Direct System	emesso	S. A.	20/11/1998	
		controllato		02/07/2002	
		nullaosta			
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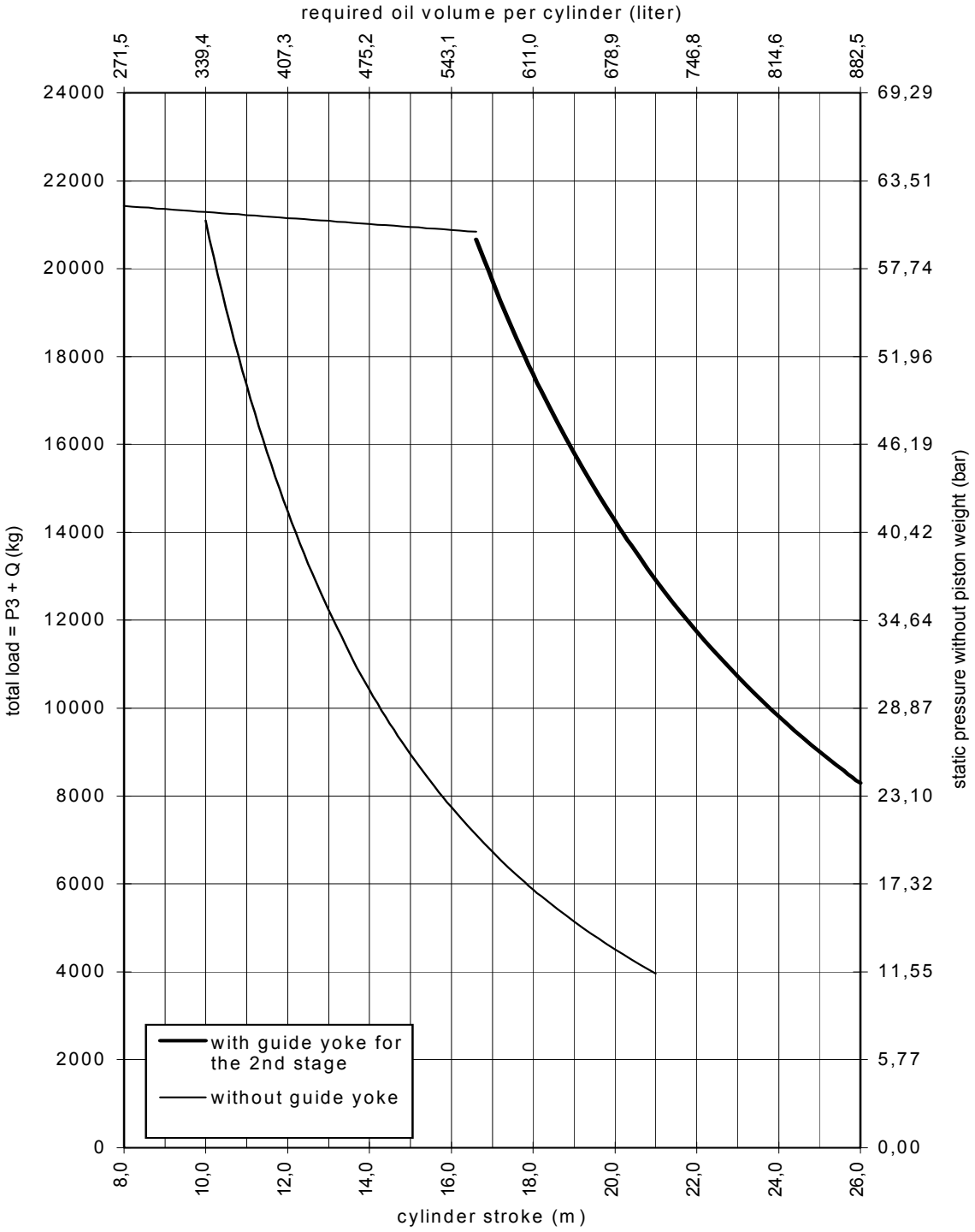
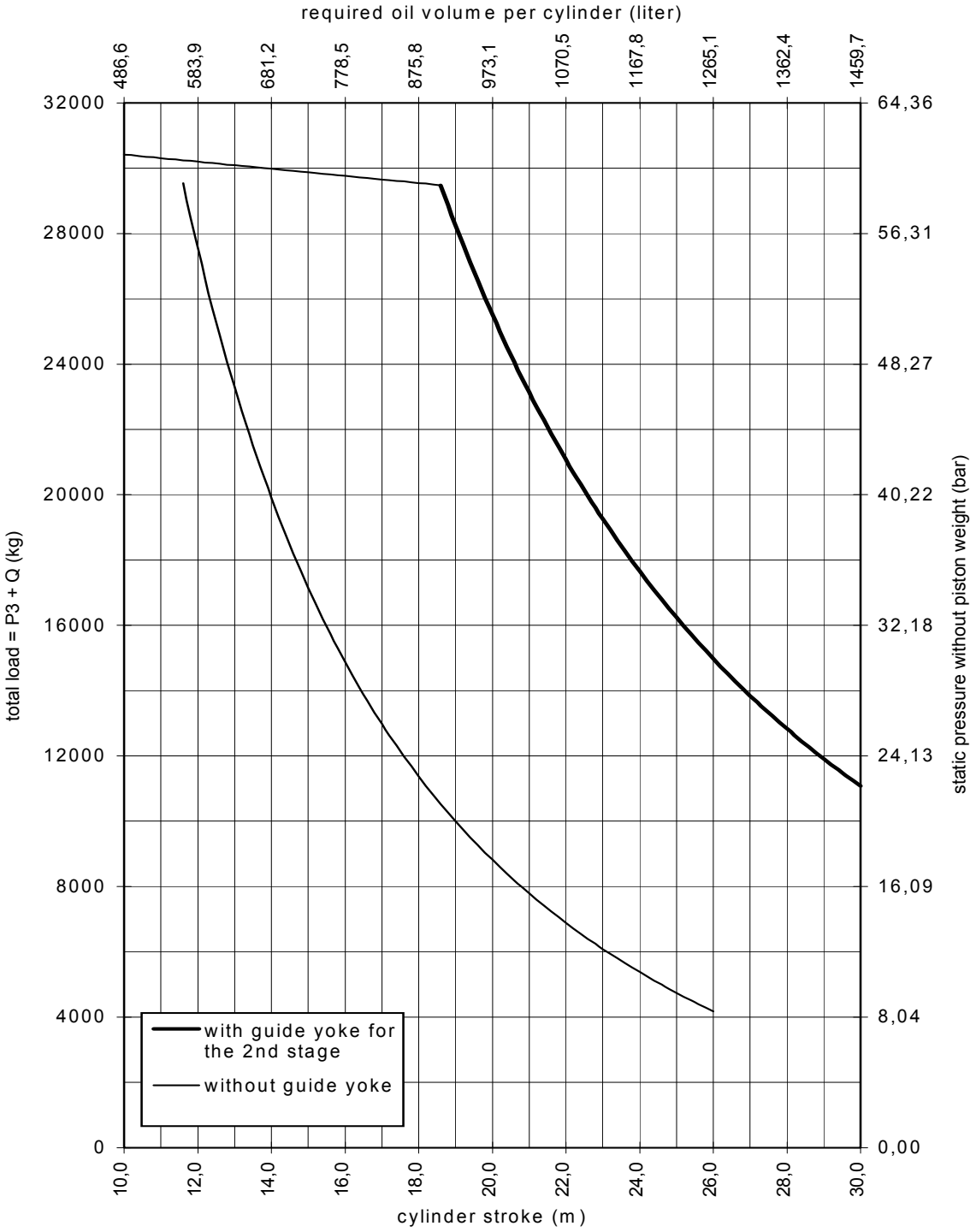
Selection diagram for Telescopic 2-stage Cylinder
Acc. to EN 81/2 - Central Direct System
Type 3PL 170/2 - VE



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 170 / 240 (mm)	Factor of excess pressure = 1,4
reference area	A = 339,810 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 217,208 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	67,844 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - Central Direct System	emesso	S. A.	20/11/1998
		controllato		02/07/2002
		nullaosta		
Sost. il 2PX0270a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 0 b		pag 10 di 11

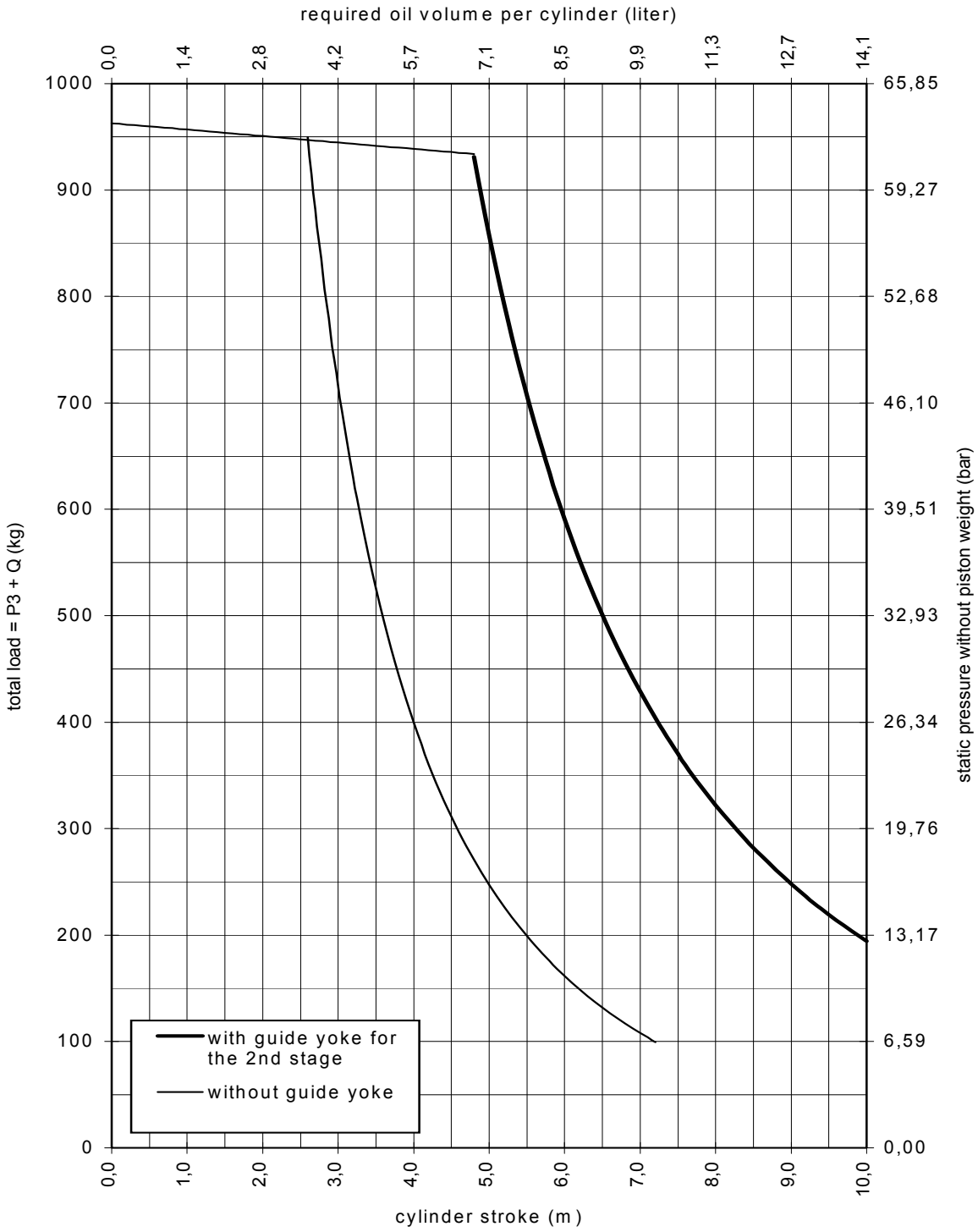
Selection diagram for Telescopic 2-stage Cylinder
Acc. to EN 81/2 - Central Direct System
Type 3PL 200/2 - VE



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 200 / 290 (mm)	Factor of excess pressure = 1,4
reference area	A = 487,765 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 332,140 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	108,890 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - Central Direct System	emesso	S. A.	20/11/1998
		controllato		02/07/2002
		nullaosta		
Sost. il 2PX0270a Sost. da	DOCUMENTAZIONI TECNICHE	2PX0270b		pag 11 di 11

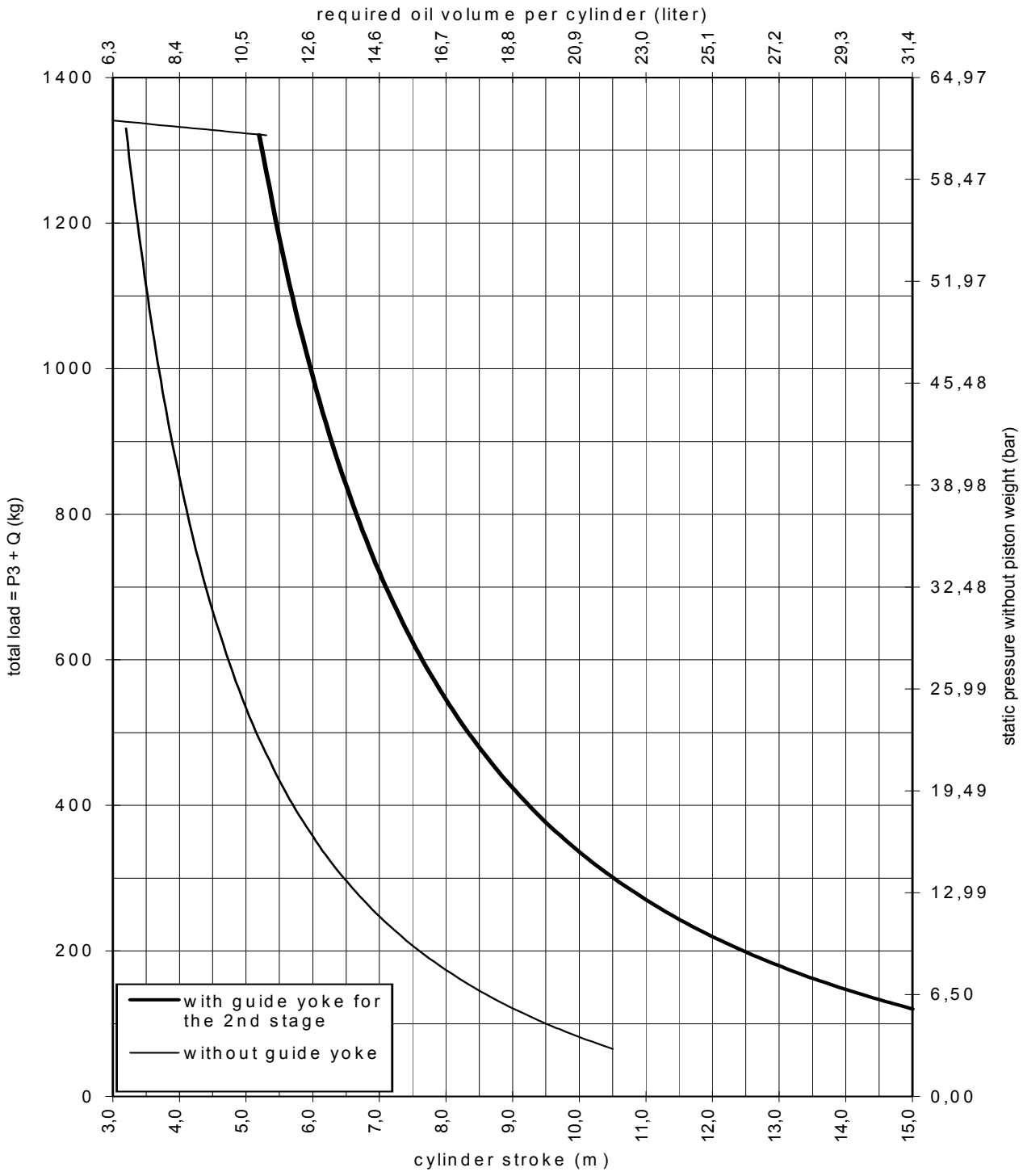
Selection diagram for Telescopic 2-stage Cylinder
Acc. to EN 81/2 - Side Ram System
Type 3PL 35/2 - RS



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 35 / 50 (mm)	Factor of excess pressure = 1,4
reference area	A = 14,897 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 9,175 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	6,045 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - Side Ram System	emesso	S. A.	20/11/1998	
		controllato		02/07/2002	
		nullaosta			
Sost. il 2 PX 0271a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 1 b		pag 1 di 11	

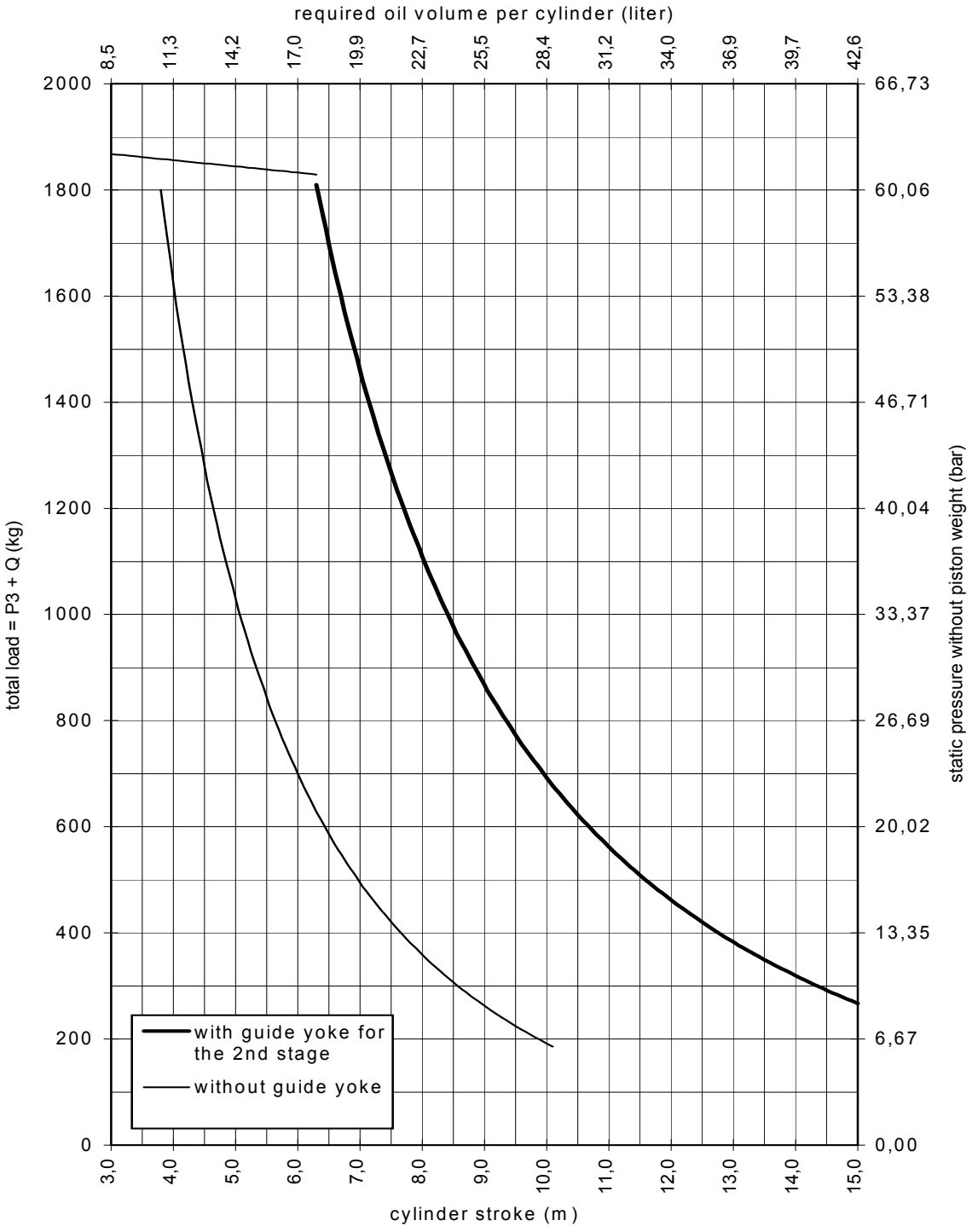
Selection diagram for Telescopic 2-stage Cylinder
Acc. to EN 81/2 - Side Ram System
Type 3PL 42/2 - RS



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 42 / 60 (mm)	Factor of excess pressure = 1,4
reference area	A = 21,138 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 11,7 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	8,8 (kg) (per meter stroke)	z = number of cylinders

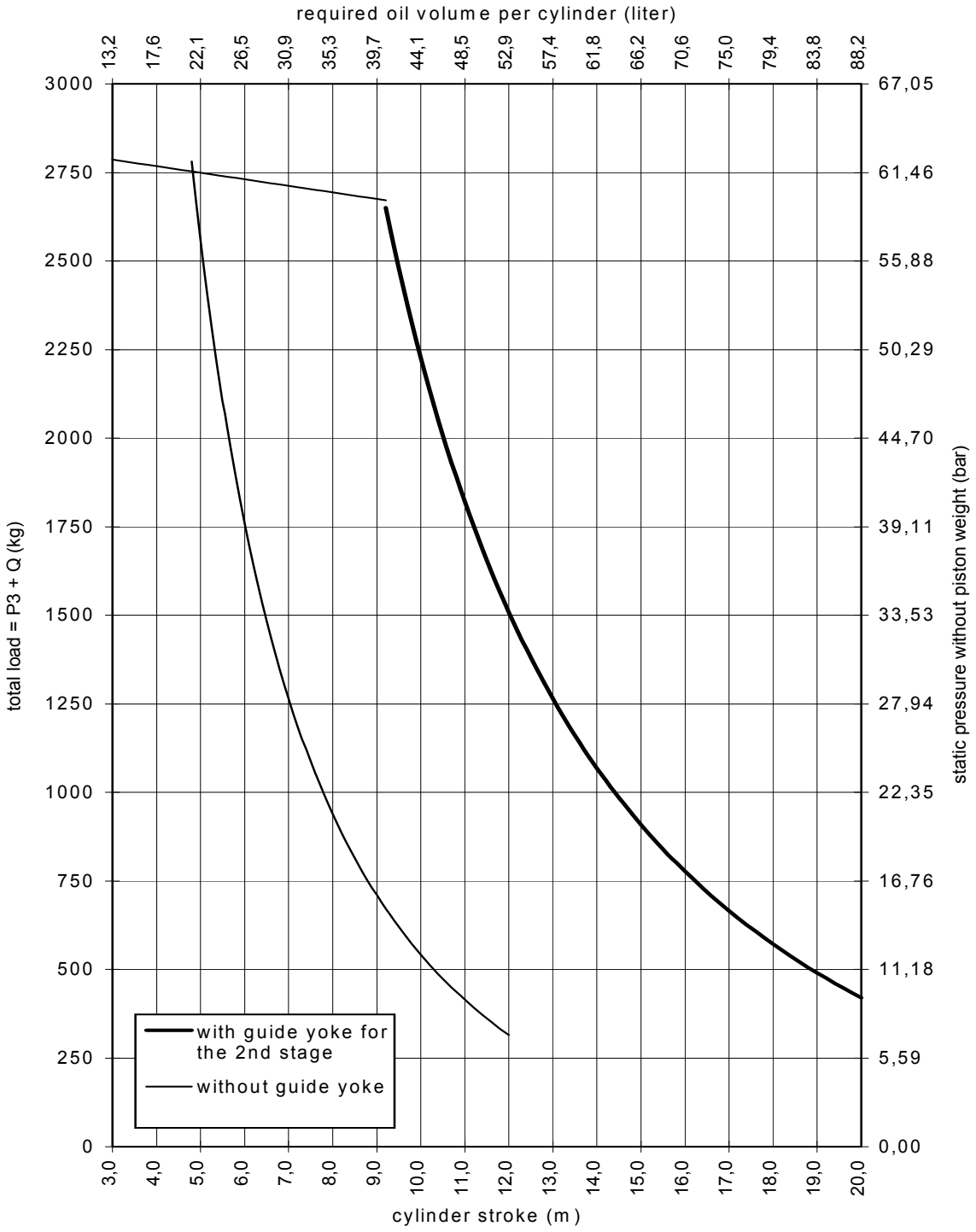
C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - Side Ram System	emesso	S. A.	20/11/1998
		controllato		02/07/2002
		nullaosta		
Sost. il 2 PX 0271a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 1 b	pag di	2 11

Selection diagram for Telescopic 2-stage Cylinder
Acc. to EN 81/2 - Side Ram System
Type 3PL 50/2 - RS



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 50 / 70 (mm)	Factor of excess pressure = 1,4
reference area	A = 29,402 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 15,188 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	11,714 (kg) (per meter stroke)	z = number of cylinders

Selection diagram for Telescopic 2-stage Cylinder
Acc. to EN 81/2 - Side Ram System
Type 3PL 63/2 - RS



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 63 / 85 (mm)	Factor of excess pressure = 1,4
reference area	A = 43,891 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 20,897 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	18,527 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - Side Ram System	emesso	S. A.	20/11/1998
		controllato		02/07/2002
		nullaosta		
Sost. il 2 PX 0271a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 1 b	pag	4
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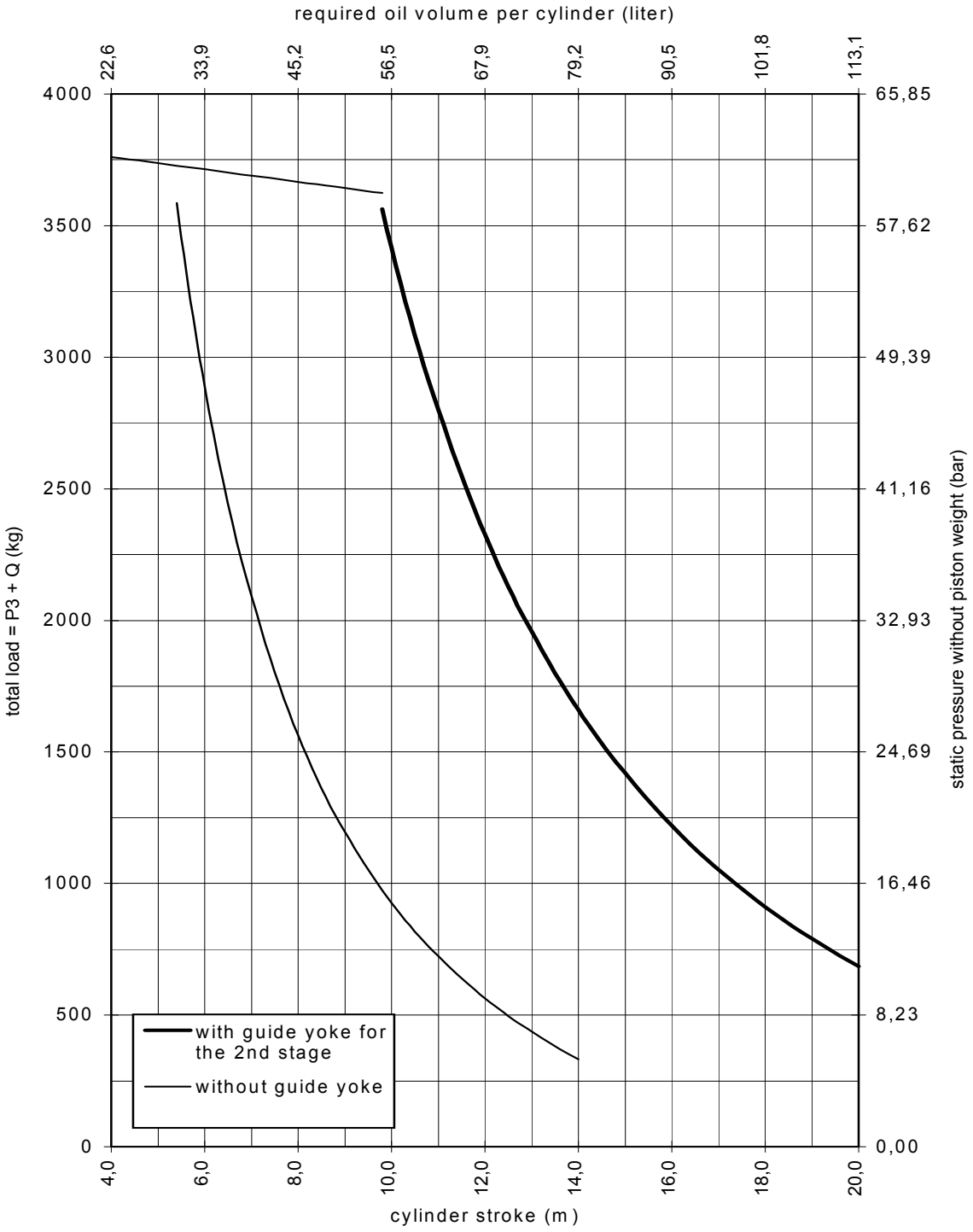
Selection diagram for Telescopic 2-stage Cylinder
Acc. to EN 81/2 - Side Ram System
Type 3PL 70/2 - RS



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 70 / 100 (mm)	Factor of excess pressure = 1,4
reference area	A = 59,589 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 31,906 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	23,659 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - Side Ram System	emesso	S. A.	20/11/1998
		controllato		02/07/2002
		nullaosta		
Sost. il 2 PX 0271a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 1 b	pag	5
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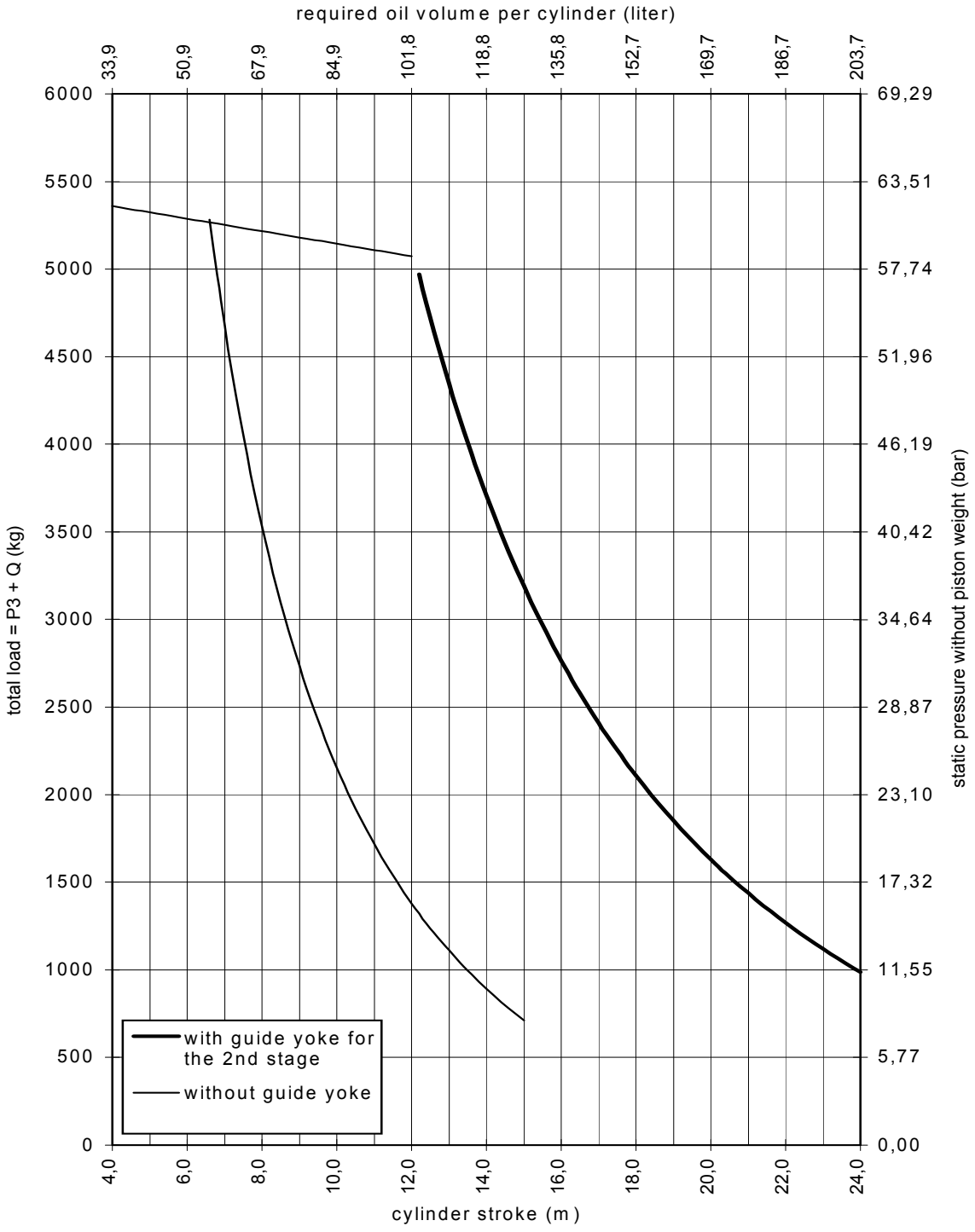
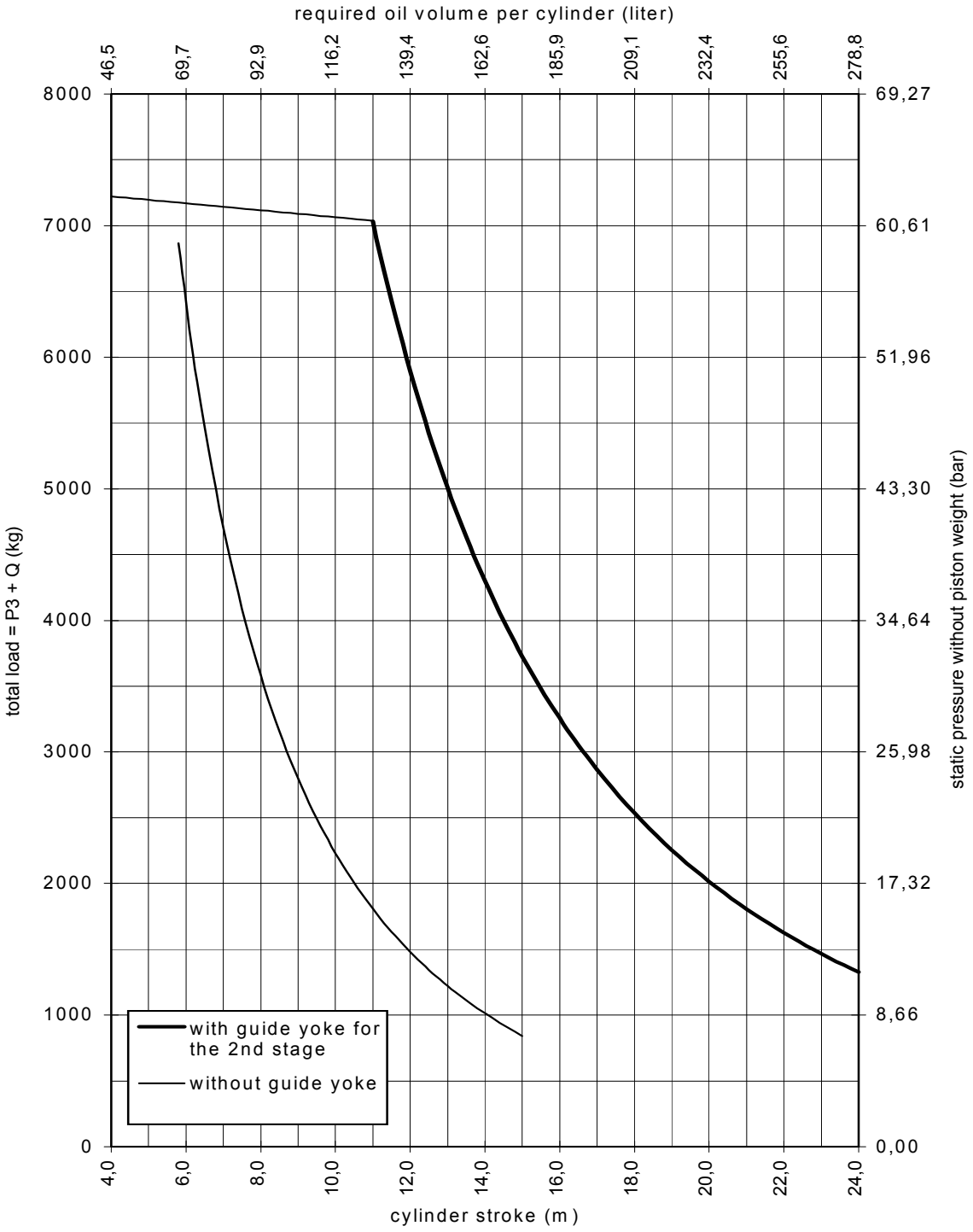
Selection diagram for Telescopic 2-stage Cylinder
Acc. to EN 81/2 - Side Ram System
Type 3PL 85/2 - RS



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 85 / 120 (mm)	Factor of excess pressure = 1,4
reference area	A = 84,952 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 39,246 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	35,836 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - Side Ram System	emesso	S. A.	20/11/1998
		controllato		02/07/2002
		nullaosta		
Sost. il 2 PX 0271a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 1 b	pag di	6 11

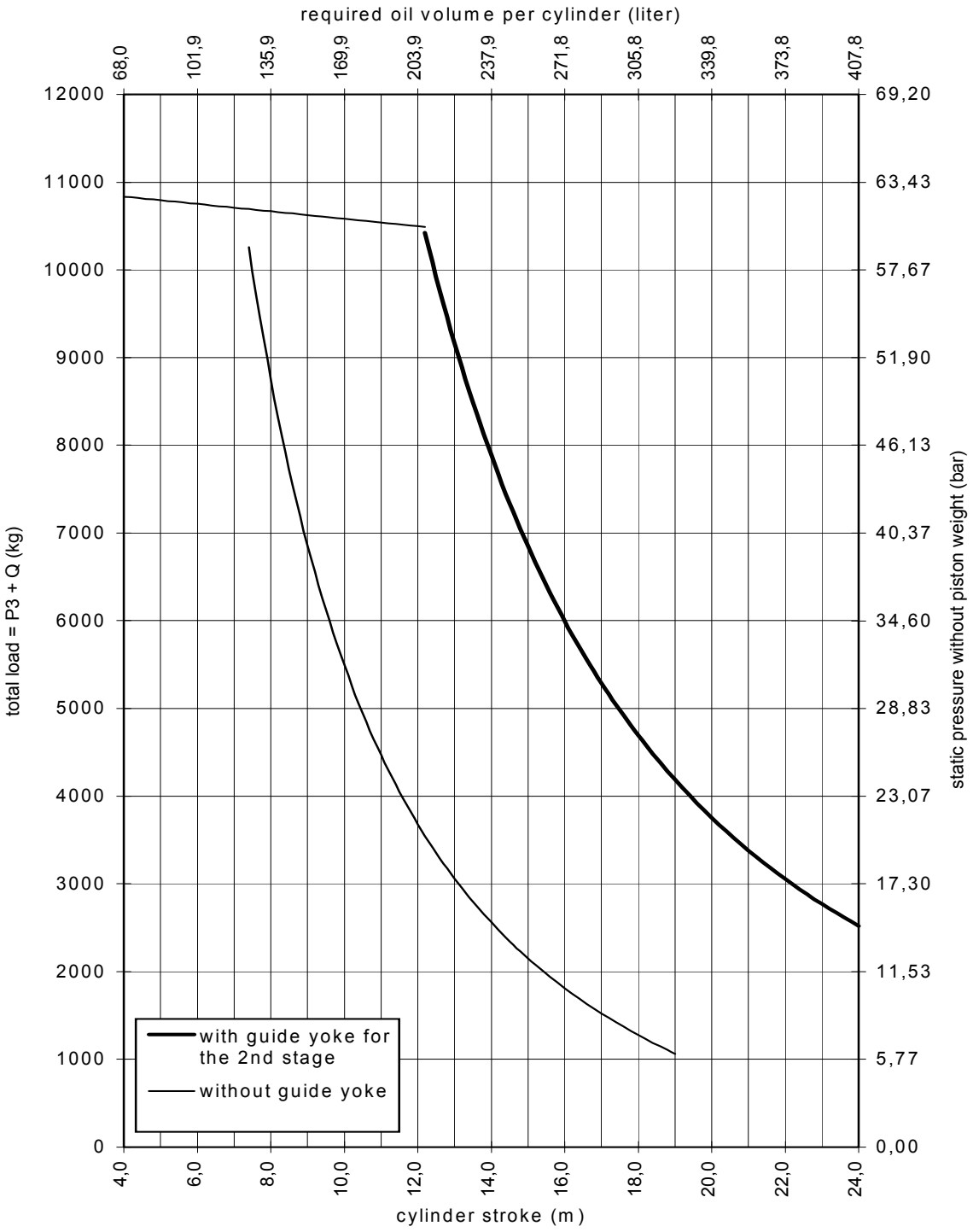
Selection diagram for Telescopic 2-stage Cylinder
Acc. to EN 81/2 - Side Ram System
Type 3PL 100/2 - RS



Selection diagram for Telescopic 2-stage Cylinder

Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 100 / 140 (mm)	Factor of excess pressure = 1,4
reference area	A = 116,269 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 64,730 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	27,128 (kg) (per meter stroke)	z = number of cylinders

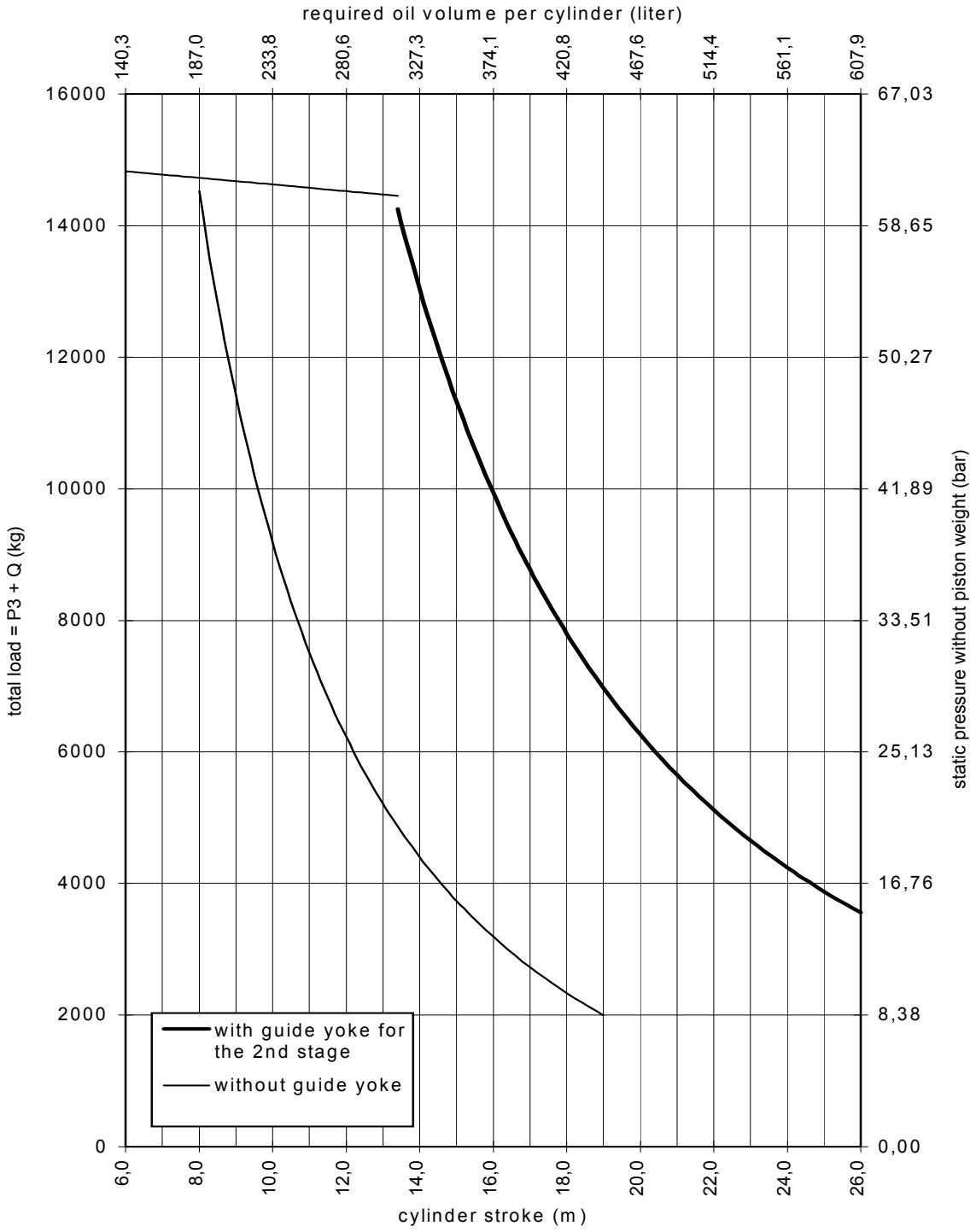
Acc. to EN 81/2 - Side Ram System
Type 3PL 120/2 - RS



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 140 / 200 (mm)	Factor of excess pressure = 1,4
reference area	A = 234,180 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 150,867 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	50,248 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - Side Ram System	emesso	S. A.	20/11/1998
		controllato		02/07/2002
		nullaosta		
Sost. il 2 PX 0271a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 1 b		pag 8 di 11

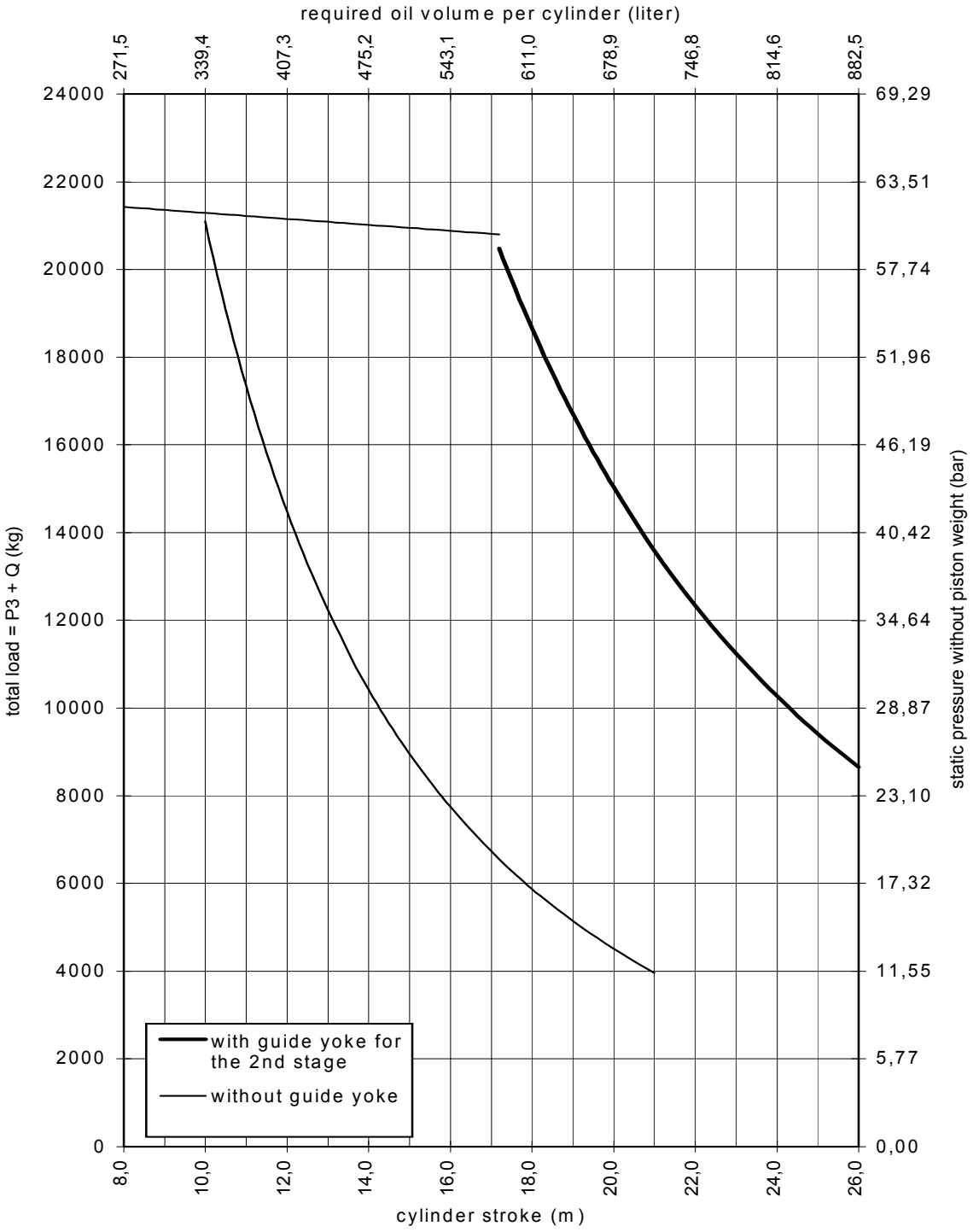
Selection diagram for Telescopic 2-stage Cylinder
Acc. to EN 81/2 - Side Ram System
Type 3PL 140/2 - RS



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 140 / 200 (mm)	Factor of excess pressure = 1,4
reference area	A = 234,180 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 150,867 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	50,248 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - Side Ram System	emesso	S. A.	20/11/1998	
		controllato		02/07/2002	
		nullaosta			
Sost. il 2 PX 0271a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 1 b		pag 9 di 11	

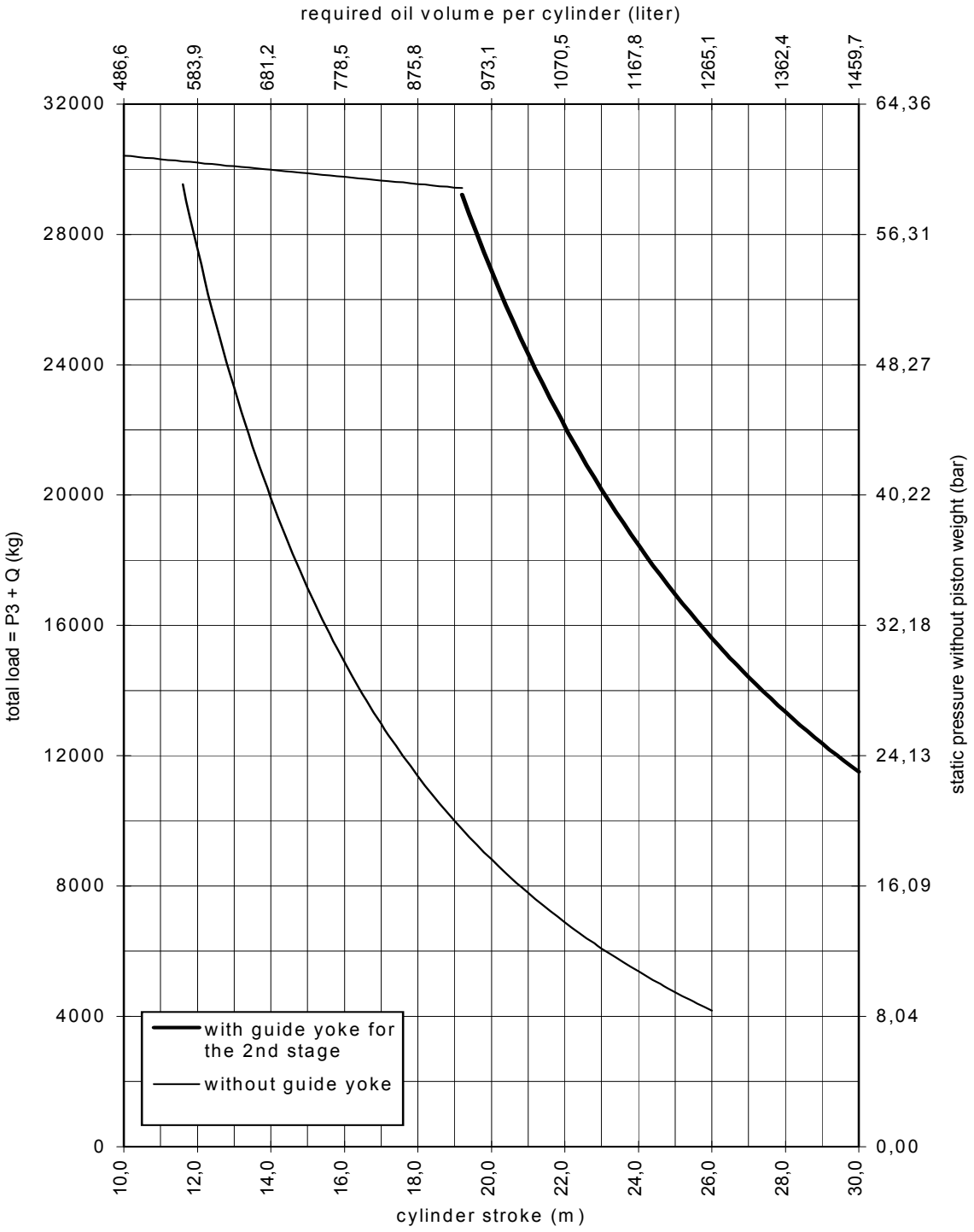
Selection diagram for Telescopic 2-stage Cylinder
Acc. to EN 81/2 - Side Ram System
Type 3PL 170/2 - RS



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 170 / 240 (mm)	Factor of excess pressure = 1,4
reference area	A = 339,810 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 202,835 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	67,844 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - Side Ram System	emesso	S. A.	20/11/1998	
		controllato		02/07/2002	
		nullaosta			
Sost. il 2 PX 0271a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 1 b		pag 10 di 11	

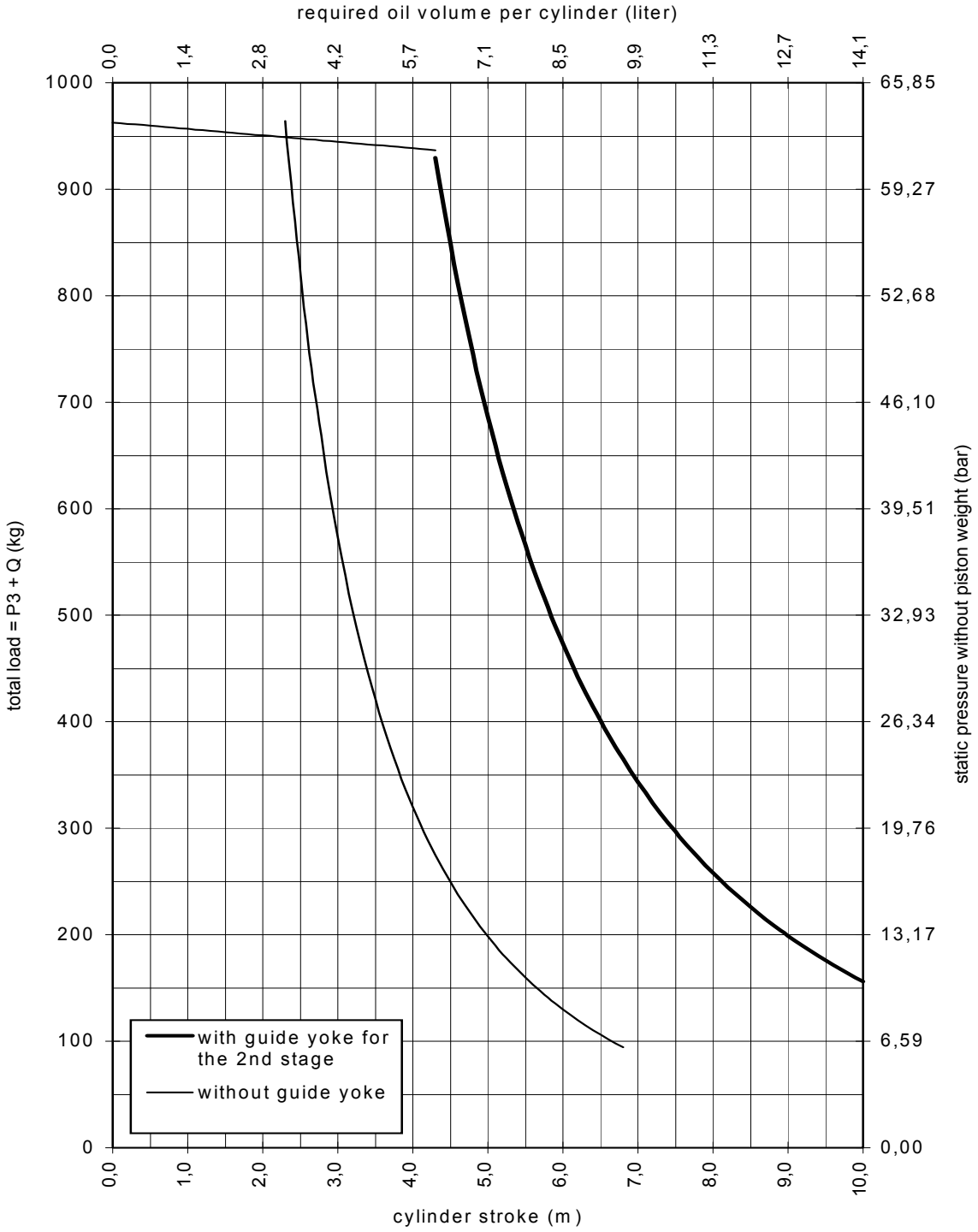
Selection diagram for Telescopic 2-stage Cylinder
Acc. to EN 81/2 - Side Ram System
Type 3PL 200/2 - RS



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 200 / 290 (mm)	Factor of excess pressure = 1,4
reference area	A = 487,765 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 313,965 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	108,890 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - Side Ram System	emesso	S. A.	20/11/1998
		controllato		02/07/2002
		nullaosta		
Sost. il 2 PX 0271a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 1 b		pag 11 di 11

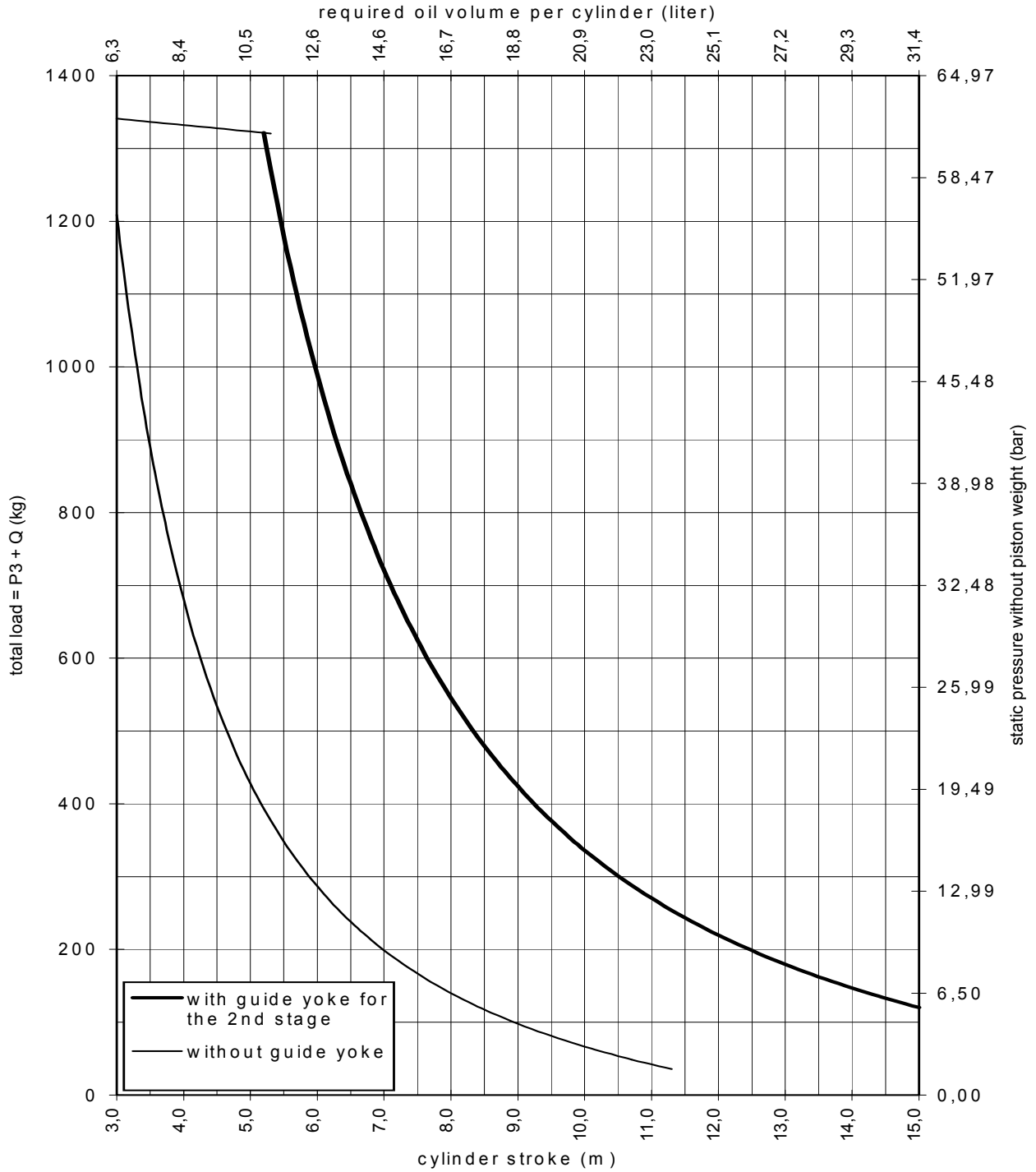
Selection diagram for Telescopic 2-stage Cylinder
Acc. to TRA 200 - Central Direct and Side Ram System
Type 3PL 35/2 - VT



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,5
piston rod diameter	d_a = 35 / 50 (mm)	Factor of excess pressure = 1,4
reference area	A = 14,897 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 9,175 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	6,045 (kg) (per meter stroke)	z = number of cylinders

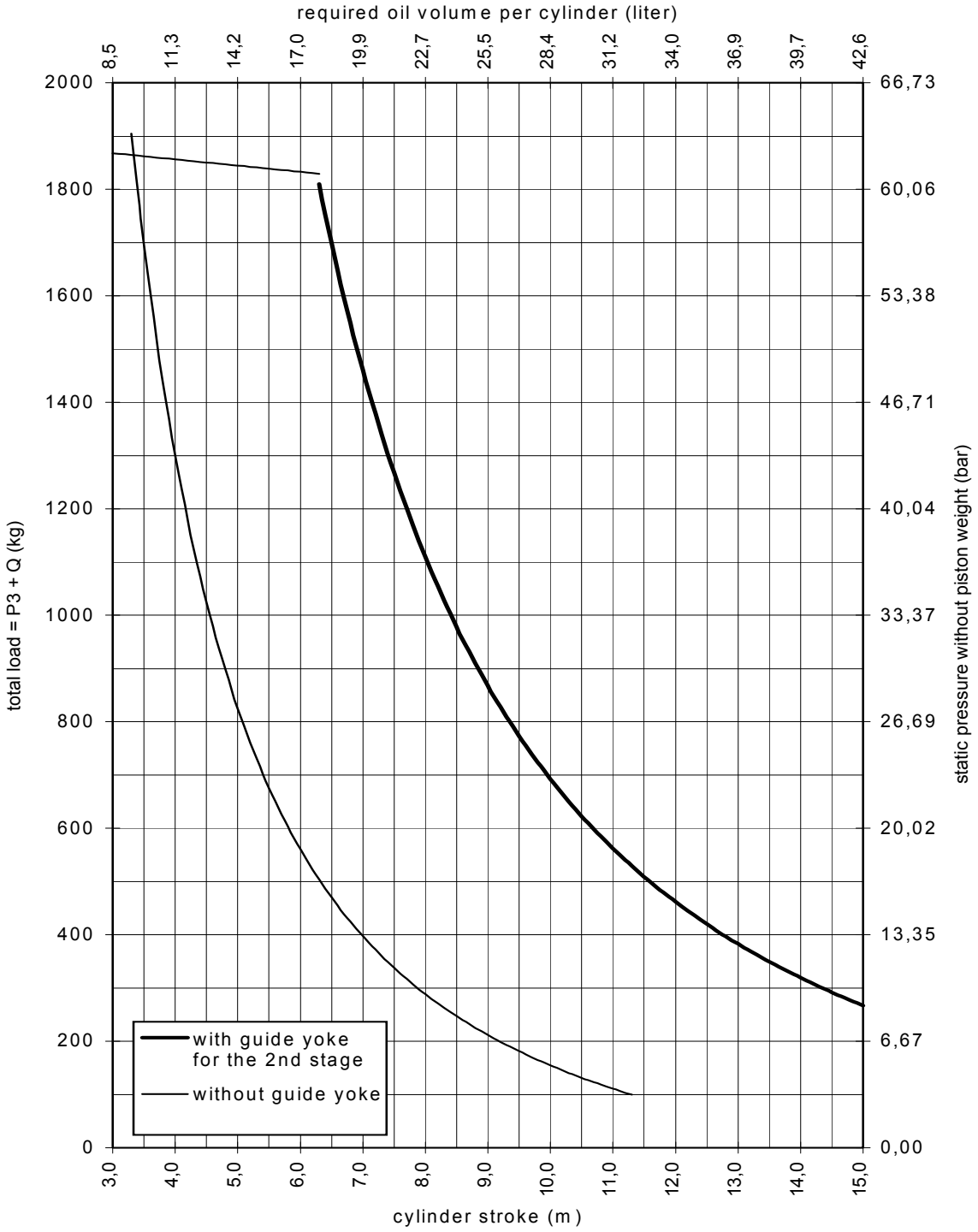
C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - VT Series	emesso	S. A.	20/11/1998
		controllato		02-07-2002
Sost. il 2 PX 0272a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 2 b	pag di	1 11

Selection diagram for Telescopic 2-stage Cylinder
Acc. to TRA 200 - Central Direct and Side Ram System
Type 3PL 42/2 - VT



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,5
piston rod diameter	d_a = 42 / 60 (mm)	Factor of excess pressure = 1,4
reference area	A = 21,138 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 11,7 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	8,8 (kg) (per meter stroke)	z = number of cylinders

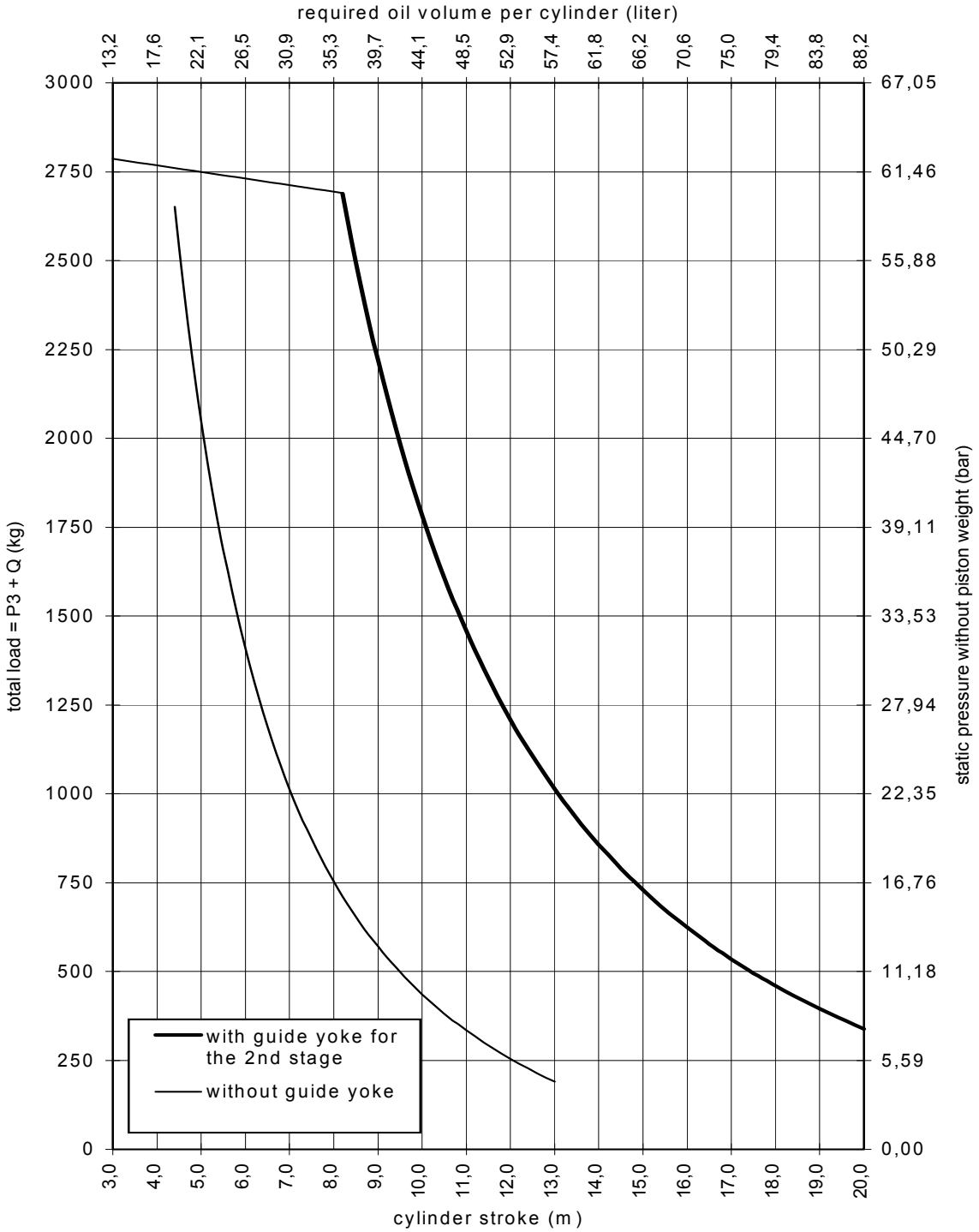
Selection diagram for Telescopic 2-stage Cylinder
Acc. to TRA 200 - Central Direct and Side Ram System
Type 3PL 50/2 - VT



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,5
piston rod diameter	d_a = 50 / 70 (mm)	Factor of excess pressure = 1,4
reference area	A = 29,402 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 15,188 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	11,714 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - VT Series	emesso	S. A.	20/11/1998
		controllato		02-07-2002
Sost. il 2 PX 0272a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 2 b	pag di	3 11

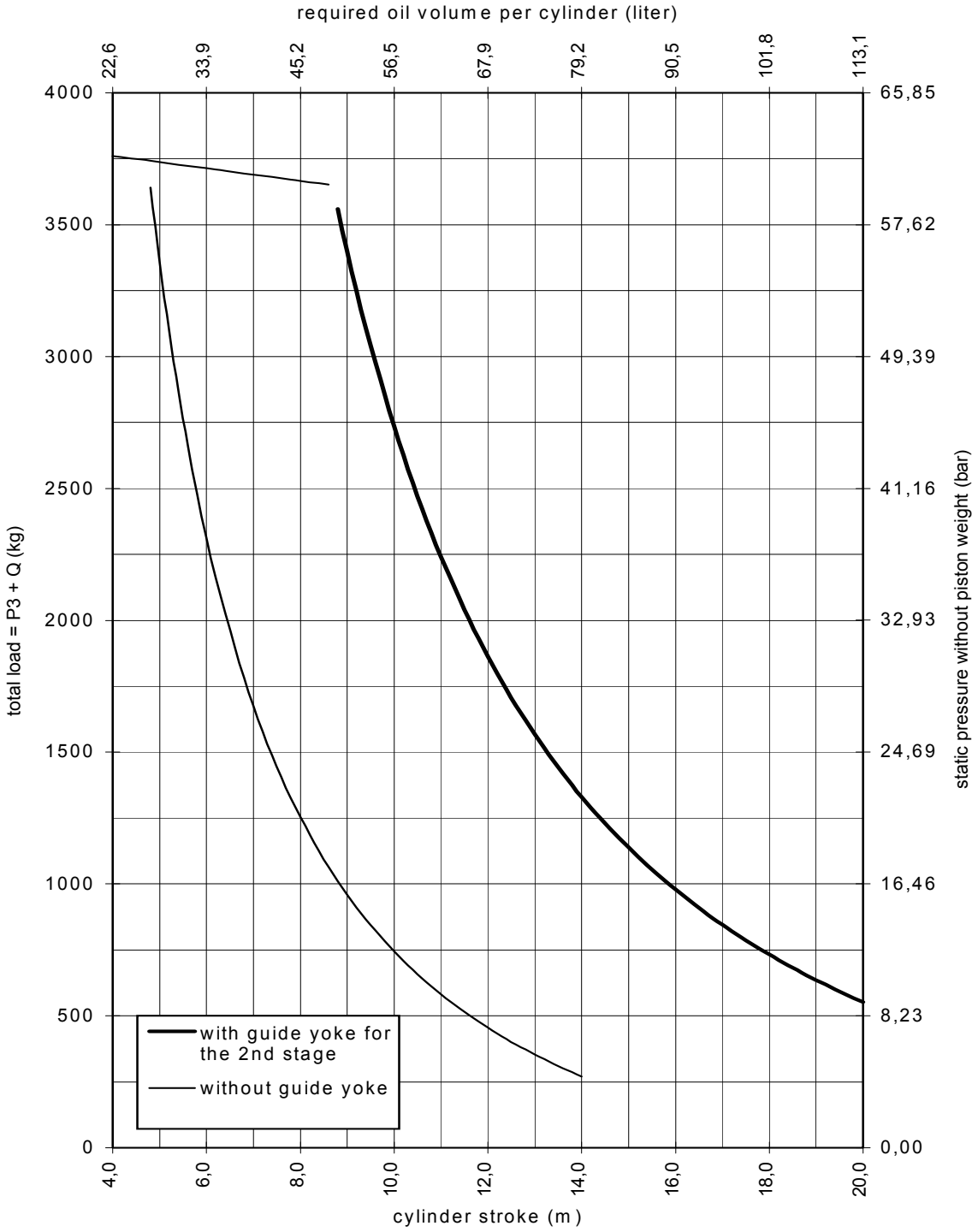
Selection diagram for Telescopic 2-stage Cylinder
Acc. to TRA 200 - Central Direct and Side Ram System
Type 3PL 63/2 - VT



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,5
piston rod diameter	d_a = 63 / 85 (mm)	Factor of excess pressure = 1,4
reference area	A = 43,891 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 20,897 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	18,527 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - VT Series	emesso	S. A.	20/11/1998
		controllato		02-07-2002
Sost. il 2 PX 0272a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 2 b		pag 4 di 11

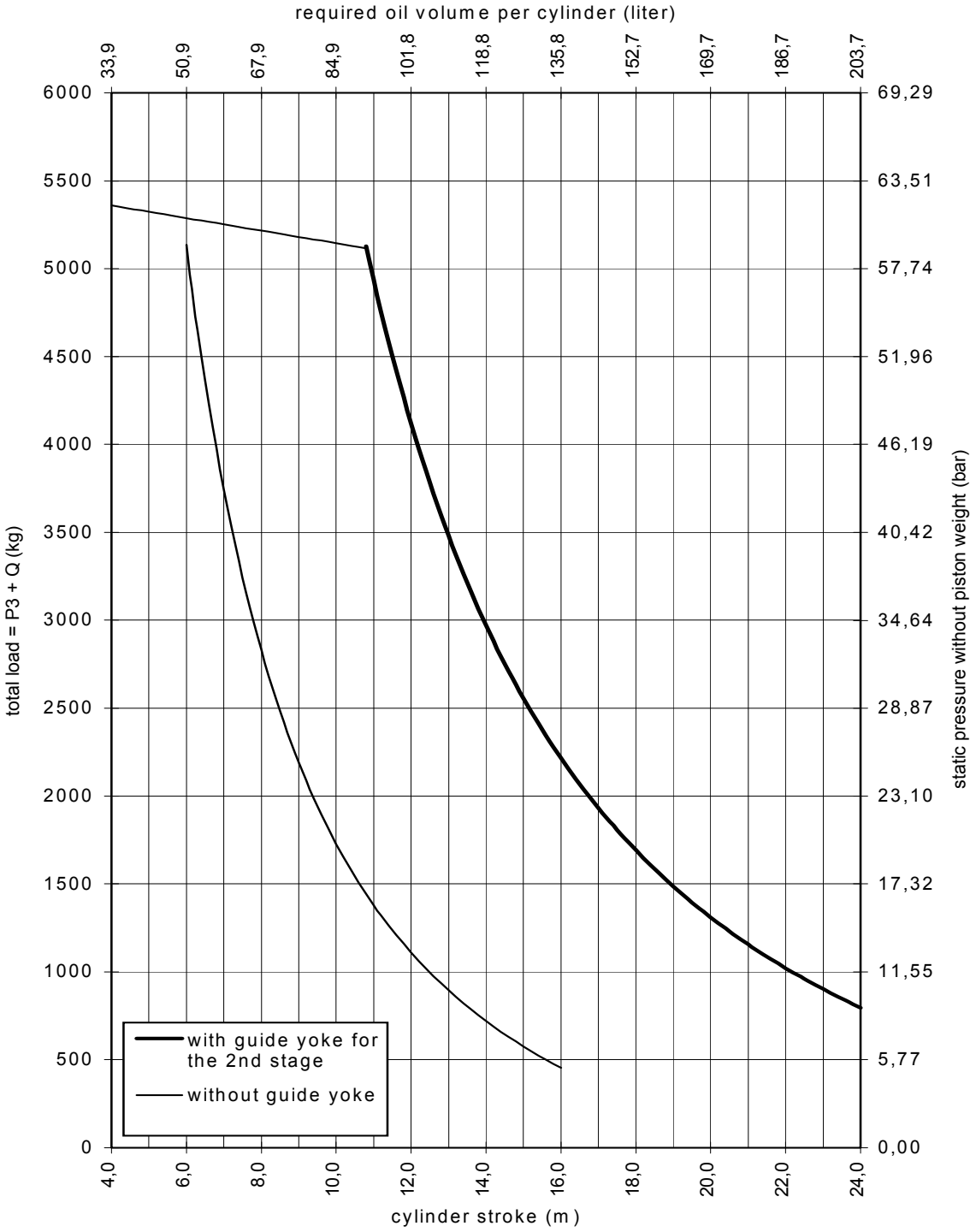
Selection diagram for Telescopic 2-stage Cylinder
Acc. to TRA 200 - Central Direct and Side Ram System
Type 3PL 70/2 - VT



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,5
piston rod diameter	d_a = 70 / 100 (mm)	Factor of excess pressure = 1,4
reference area	A = 59,589 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 31,906 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	23,659 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - VT Series	emesso	S. A.	20/11/1998
		controllato		02-07-2002
Sost. il 2 PX 0272a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 2 b		pag 5 di 11

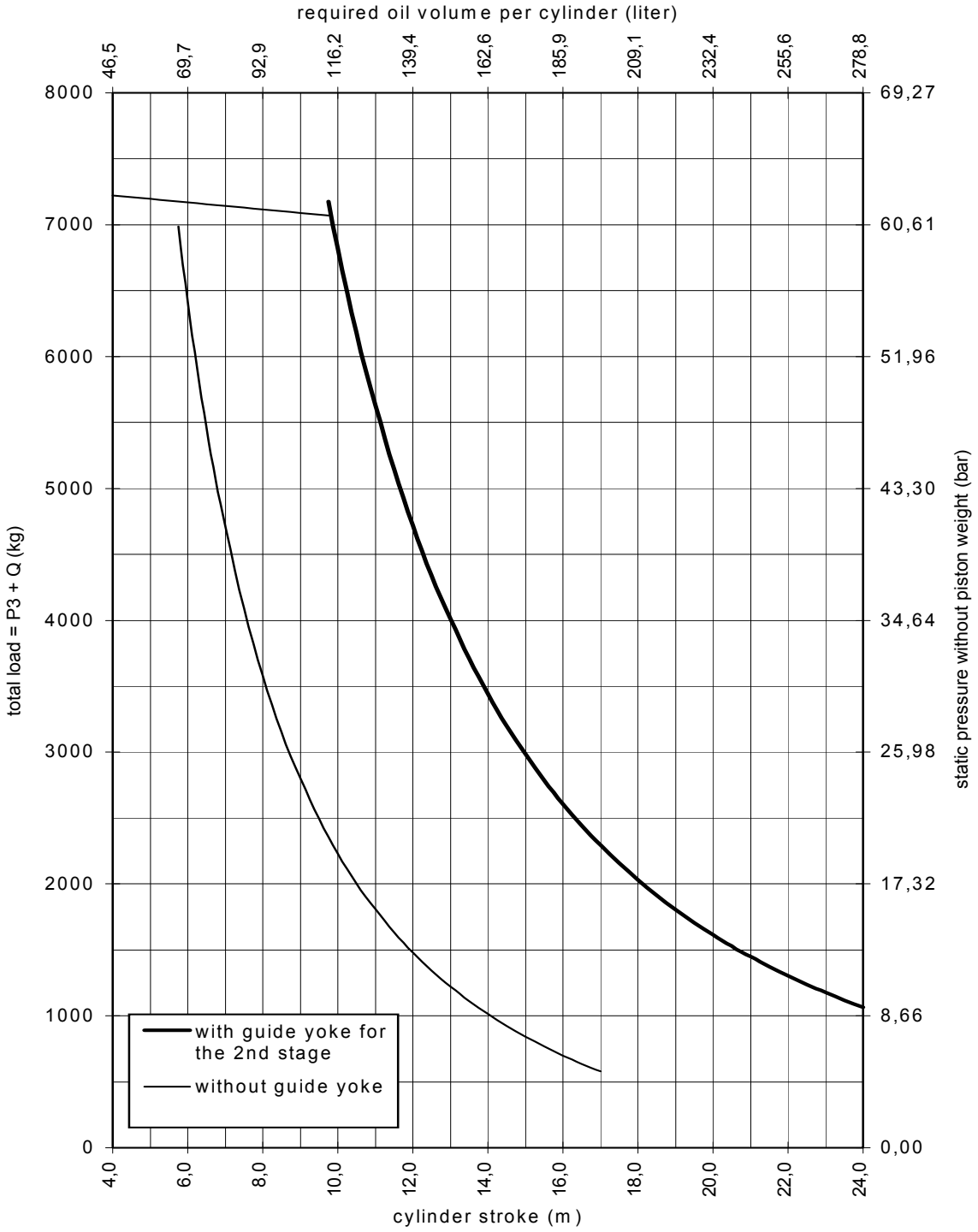
Selection diagram for Telescopic 2-stage Cylinder
Acc. to TRA 200 - Central Direct and Side Ram System
Type 3PL 85/2 - VT



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,5
piston rod diameter	d_a = 85 / 120 (mm)	Factor of excess pressure = 1,4
reference area	A = 84,952 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 39,246 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	35,836 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - VT Series	emesso	S. A.	20/11/1998
		controllato		02-07-2002
Sost. il 2 PX 0272a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 2 b		pag 6 di 11

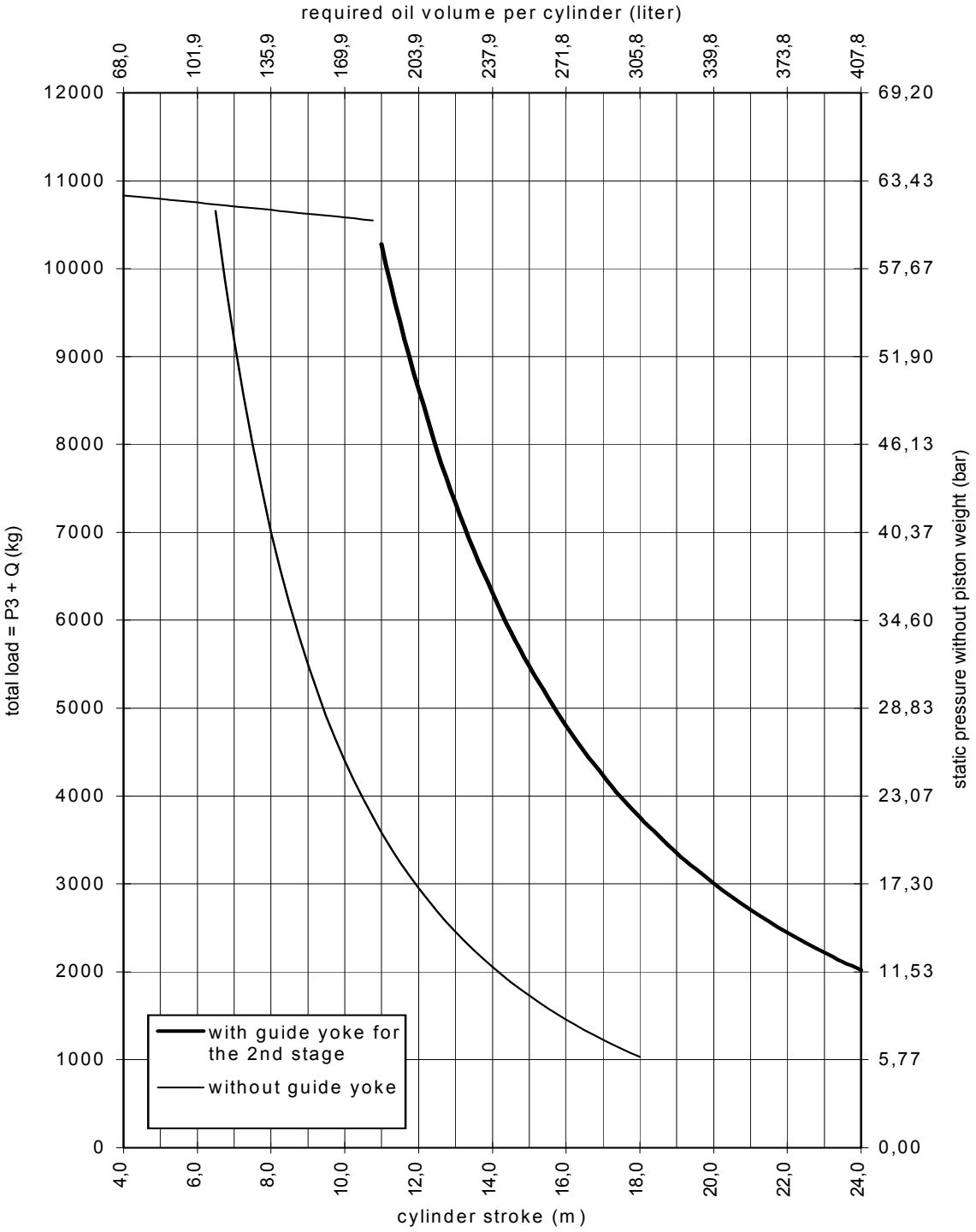
Selection diagram for Telescopic 2-stage Cylinder
Acc. to TRA 200 - Central Direct and Side Ram System
Type 3PL 100/2 - VT



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,5
piston rod diameter	d_a = 100 / 140 (mm)	Factor of excess pressure = 1,4
reference area	A = 116,269 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 64,730 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	27,128 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - VT Series	emesso	S. A.	20/11/1998
		controllato		02-07-2002
Sost. il 2 PX 0272a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 2 b	pag di	7 11

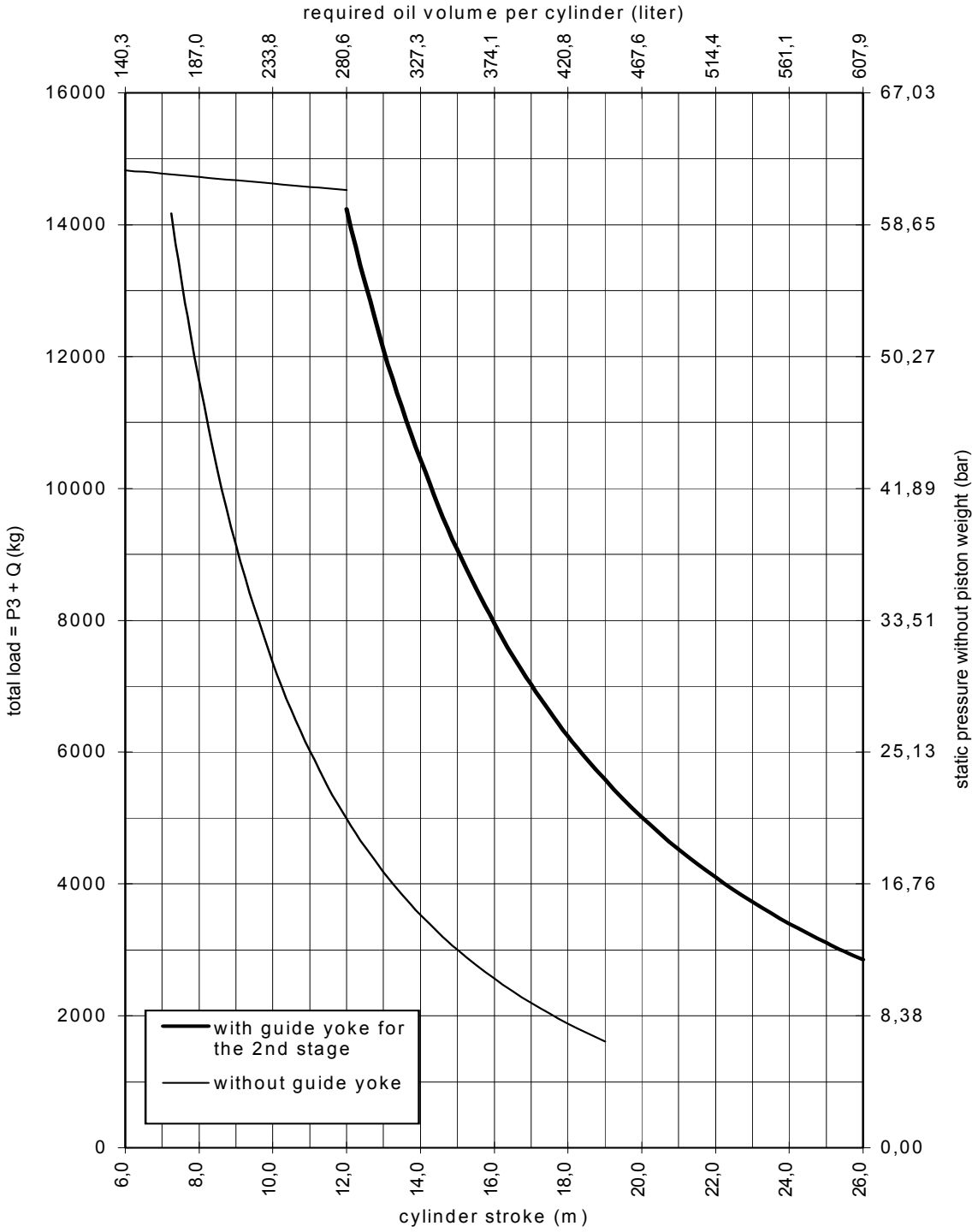
Selection diagram for Telescopic 2-stage Cylinder
Acc. to TRA 200 - Central Direct and Side Ram System
Type 3PL 120/2 - VT



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,5
piston rod diameter	d_a = 120 / 170 (mm)	Factor of excess pressure = 1,4
reference area	A = 170,110 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 93,272 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	42,233 (kg) (per meter stroke)	z = number of cylinders

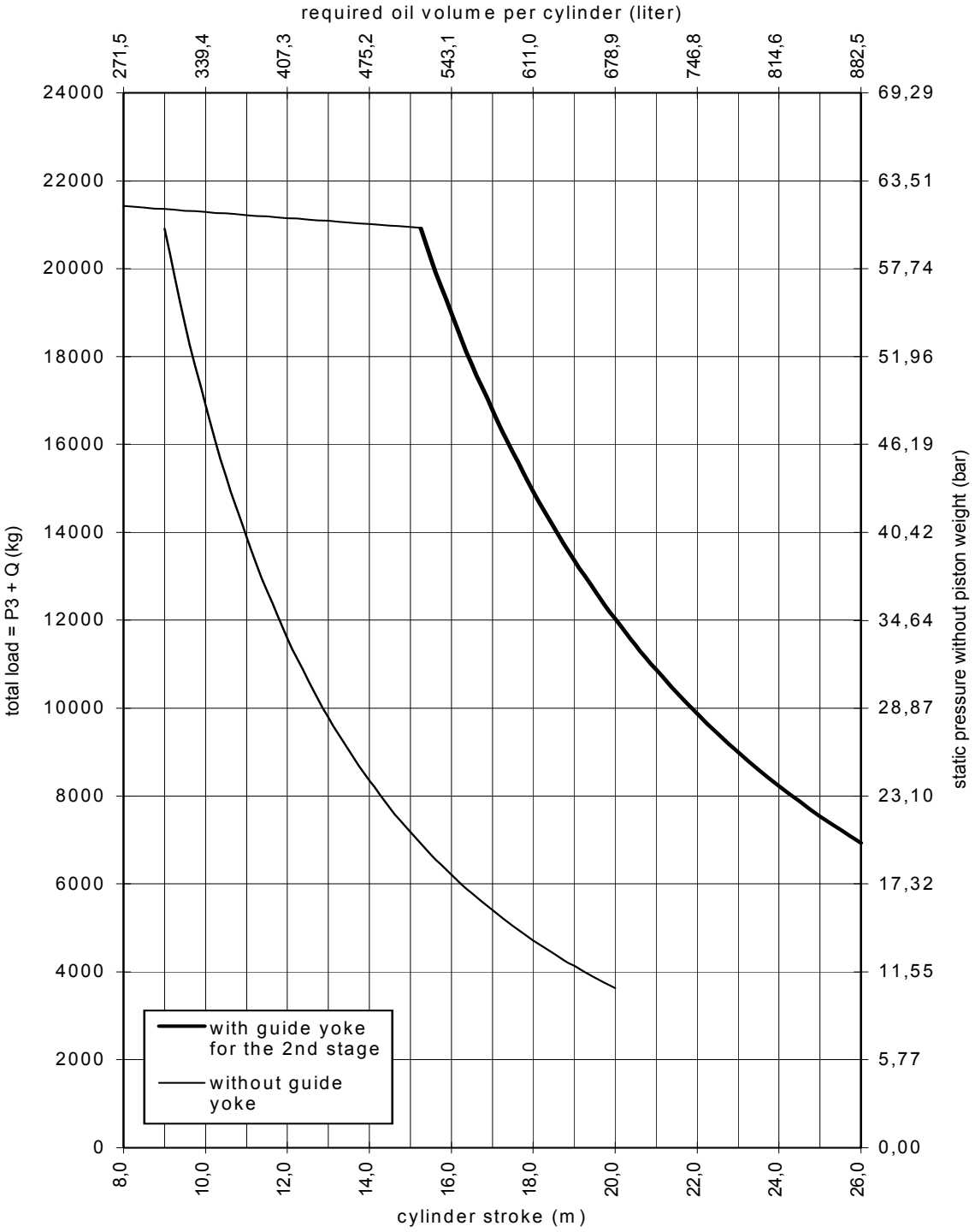
C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - VT Series	emesso	S. A.	20/11/1998
		controllato		02-07-2002
Sost. il 2 PX 0272a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 2 b	pag di	8 11

Selection diagram for Telescopic 2-stage Cylinder
Acc. to TRA 200 - Central Direct and Side Ram System
Type 3PL 140/2 - VT



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,5
piston rod diameter	d_a = 140 / 200 (mm)	Factor of excess pressure = 1,4
reference area	A = 234,180 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 150,867 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	50,248 (kg) (per meter stroke)	z = number of cylinders

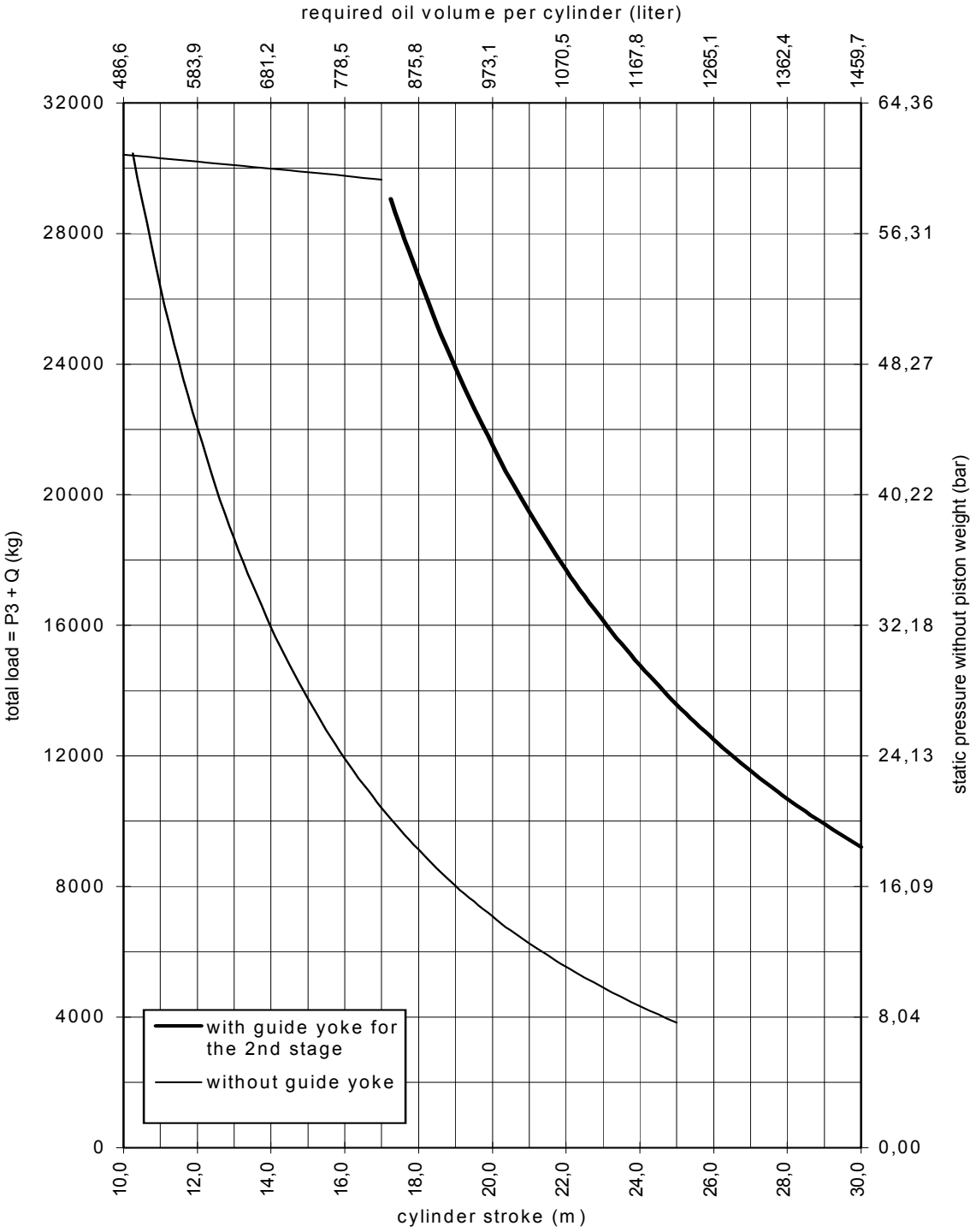
Selection diagram for Telescopic 2-stage Cylinder
Acc. to TRA 200 - Central Direct and Side Ram System
Type 3PL 170/2 - VT



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,5
piston rod diameter	d_a = 170 / 240 (mm)	Factor of excess pressure = 1,4
reference area	A = 339,810 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 202,835 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	67,844 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - VT Series	emesso	S. A.	20/11/1998
		controllato		02-07-2002
Sost. il 2 PX 0272a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 2 b	pag	10
			di	11

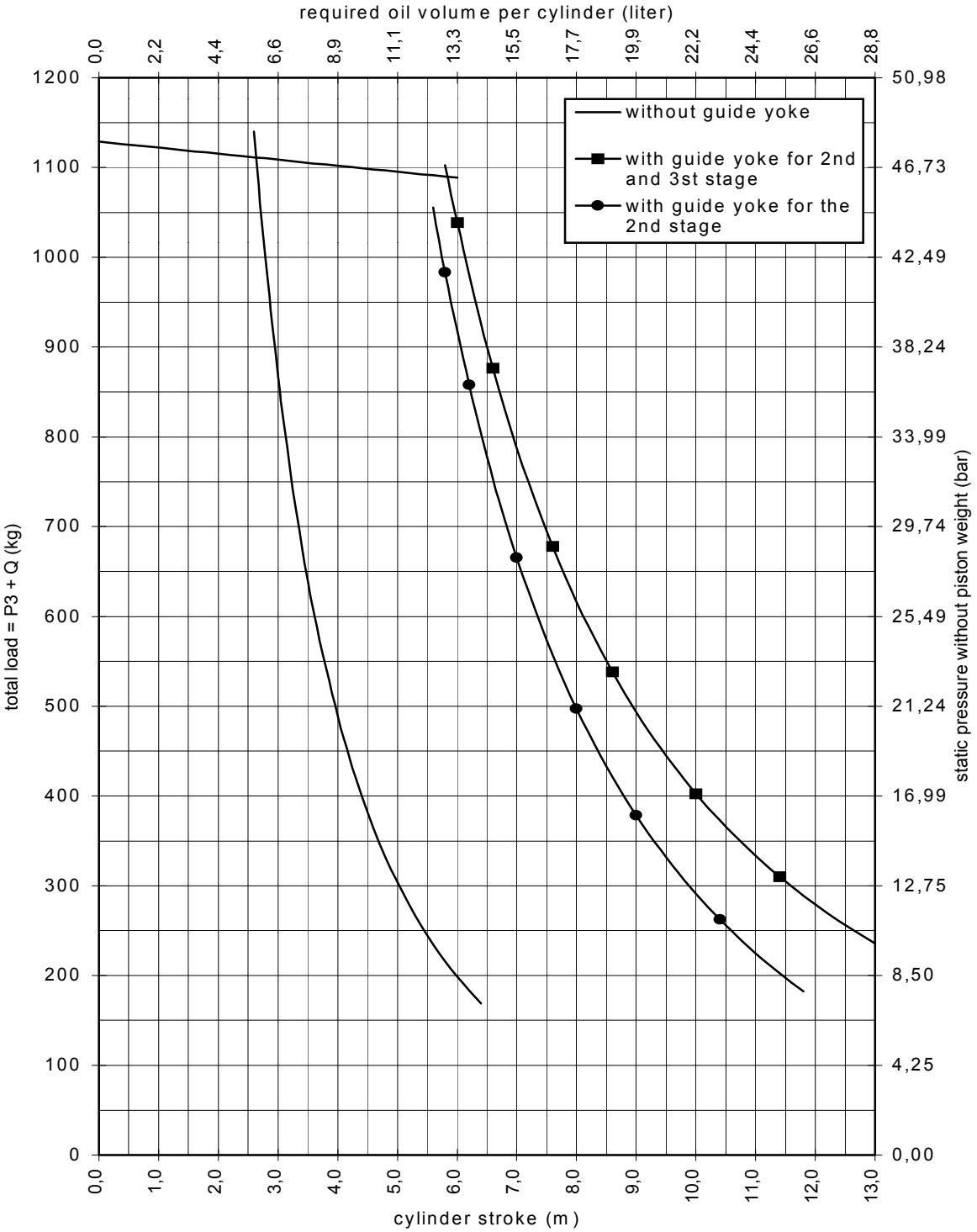
Selection diagram for Telescopic 2-stage Cylinder
Acc. to TRA 200 - Central Direct and Side Ram System
Type 3PL 200/2 - VT



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 64 (bar)	Factor of safety to buckling = 2,5
piston rod diameter	d_a = 200 / 290 (mm)	Factor of excess pressure = 1,4
reference area	A = 487,765 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 313,965 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	108,890 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 2-stage cylinder - VT Series	emesso	S. A.	20/11/1998
		controllato		02-07-2002
Sost. il 2 PX 0272a Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 2 b	pag di	11 11

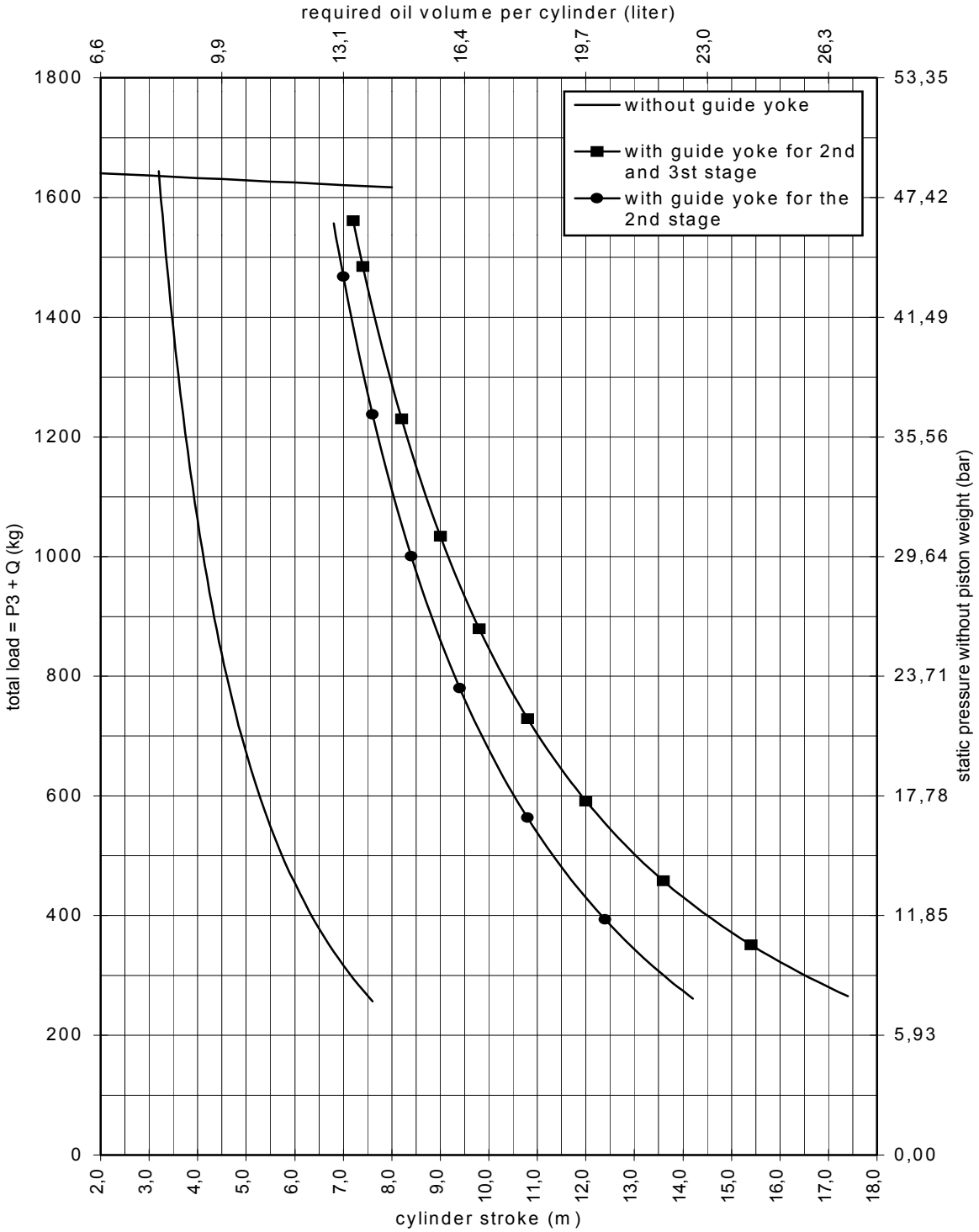
Selection diagram for Telescopic 3-stage Cylinder
Acc. to EN 81/2 - Central Direct System
Type 3PL 35/3 - VE



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 49 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 35 / 50 / 70 (mm)	Factor of excess pressure = 1,4
reference area	A = 23,090 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 28,488 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	6,702 (kg) (per meter stroke)	z = number of cylinders

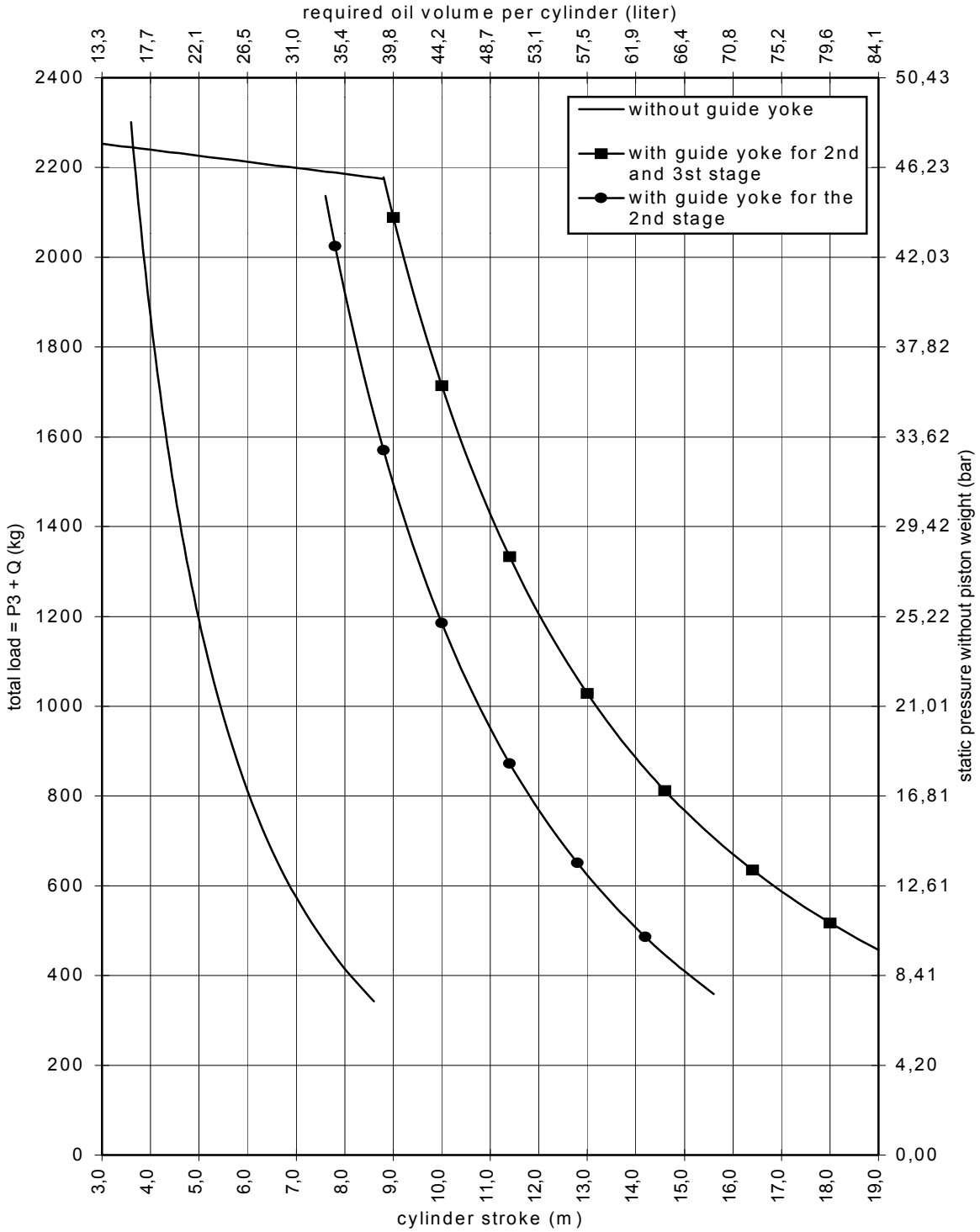
C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - Central Direct System	emesso	S. A.	20/11/1998
		controllato		20/11/1998
		nullaosta		
Sost. il 2PX0273 Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 3 a		pag 1 di 9

Selection diagram for Telescopic 3-stage Cylinder
Acc. to EN 81/2 - Central Direct System
Type 3PL 42/3 - VE



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 50 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 42 / 60 / 85 (mm)	Factor of excess pressure = 1,4
reference area	A = 33,100 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 32,790 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	9,782 (kg) (per meter stroke)	z = number of cylinders

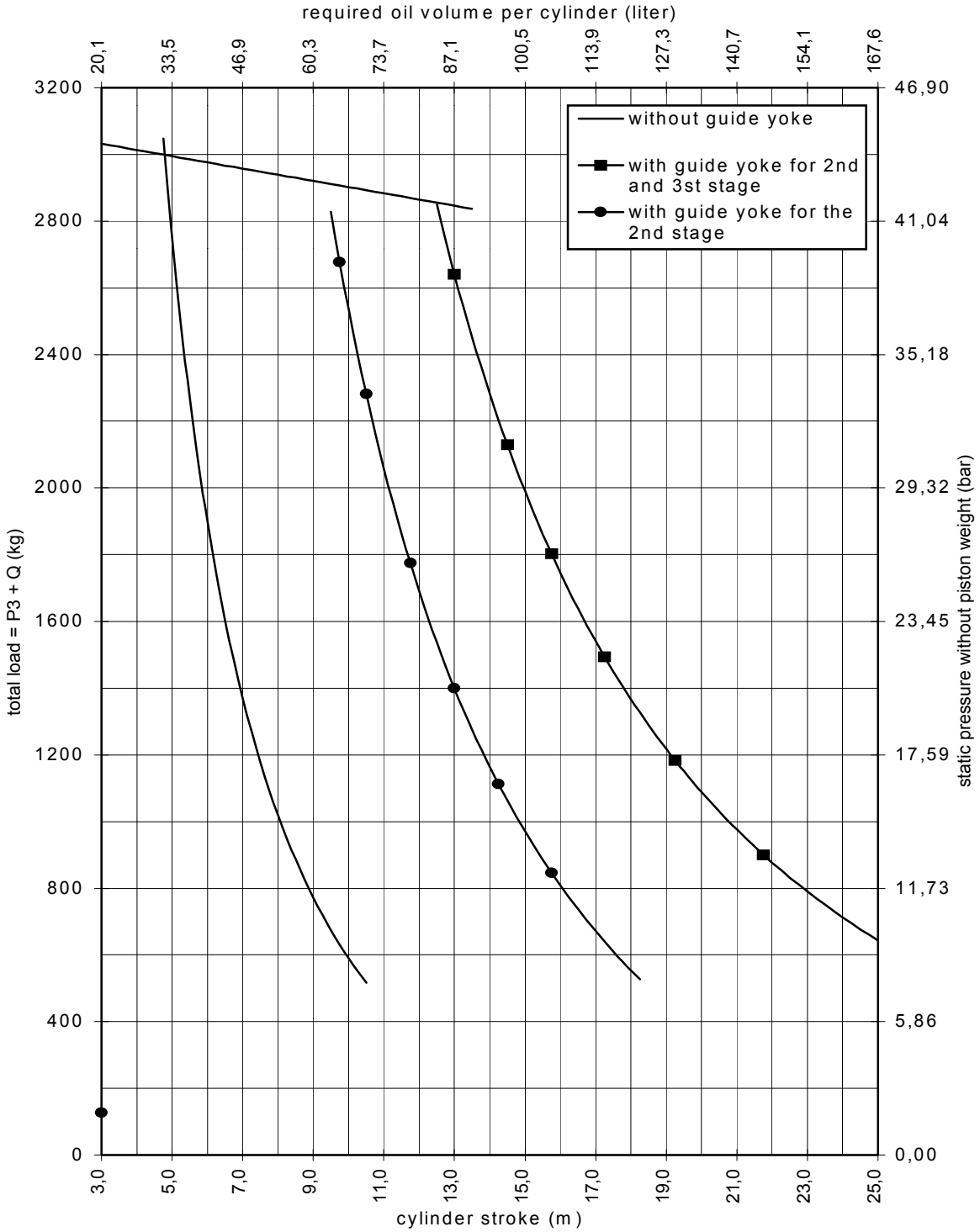
Selection diagram for Telescopic 3-stage Cylinder
Acc. to EN 81/2 - Central Direct System
Type 3PL 50/3 - VE



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 49 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 50 / 70 / 100 (mm)	Factor of excess pressure = 1,4
reference area	A = 46,684 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 45,498 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	13,512 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - Central Direct System	emesso	S. A.	20/11/1998
		controllato		20/11/1998
		nullaosta		
Sost. il 2PX0273 Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 3 a		pag 3 di 9

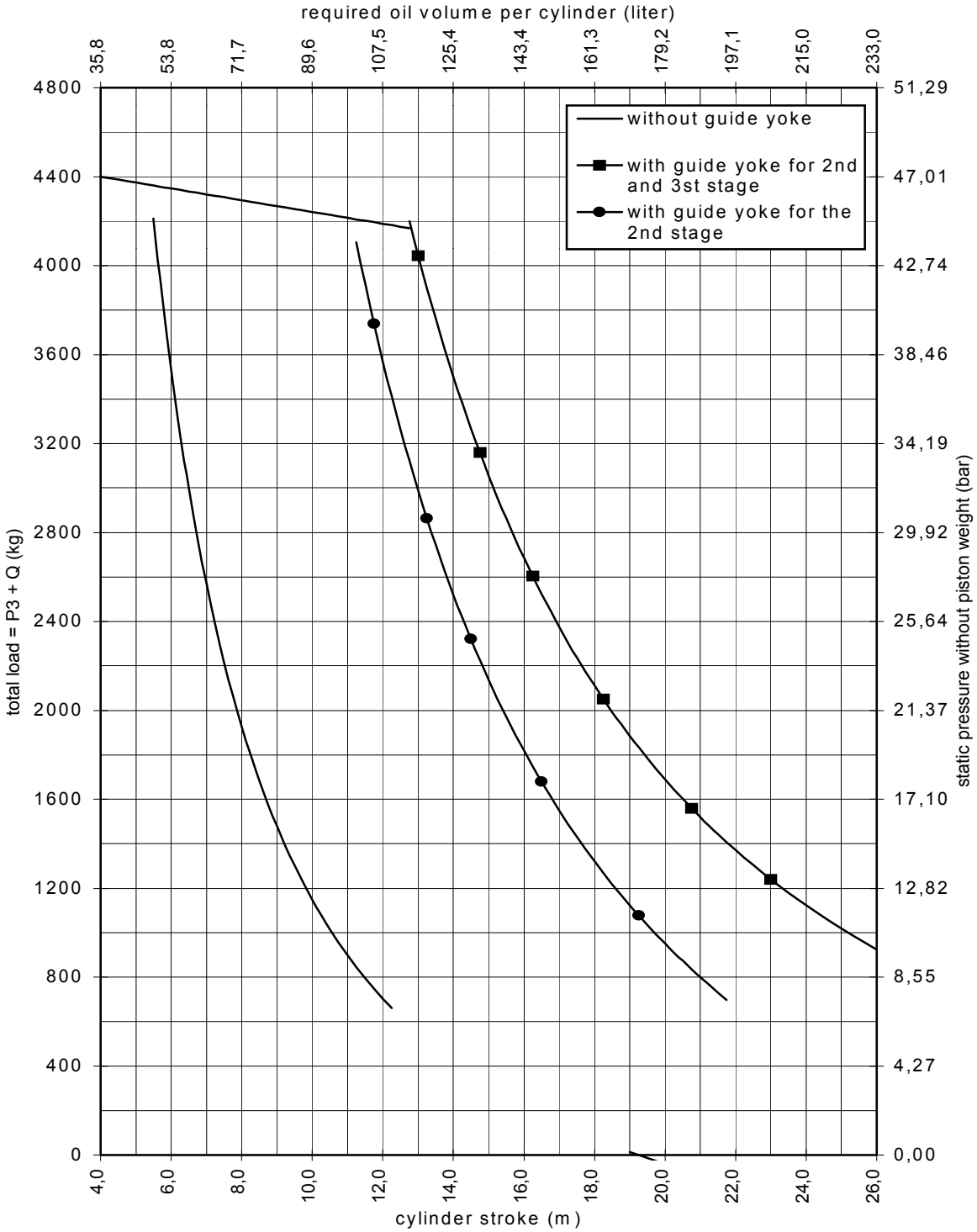
Selection diagram for Telescopic 3-stage Cylinder
Acc. to EN 81/2 - Central Direct System
Type 3PL 63/3 - VE



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 46 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 63 / 85 / 120 (mm)	Factor of excess pressure = 1,4
reference area	A = 66,928 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 61,714 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	18,556 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - Central Direct System	emesso	S. A.	20/11/1998
		controllato		20/11/1998
		nullaosta		
Sost. il 2PX0273 / Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 3 a	pag	4
			di	9

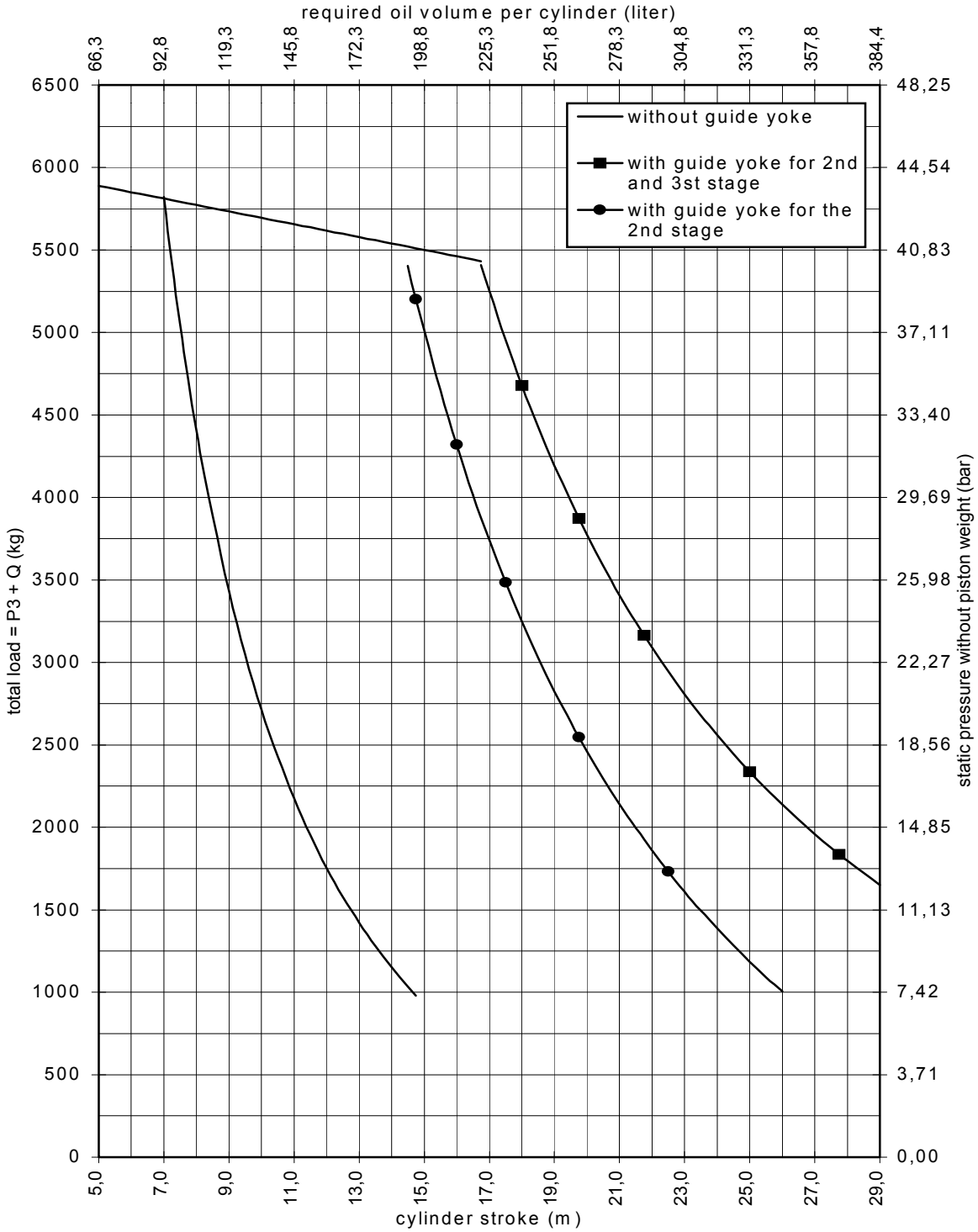
Selection diagram for Telescopic 3-stage Cylinder
Acc. to EN 81/2 - Central Direct System
Type 3PL 70/3 - VE



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 49 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 70 / 100 / 140 (mm)	Factor of excess pressure = 1,4
reference area	A = 91,816 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 94,726 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	26,460 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - Central Direct System	emesso	S. A.	20/11/1998
		controllato		20/11/1998
		nullaosta		
Sost. il 2PX0273	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 3 a	pag	5
Sost. da			di	9

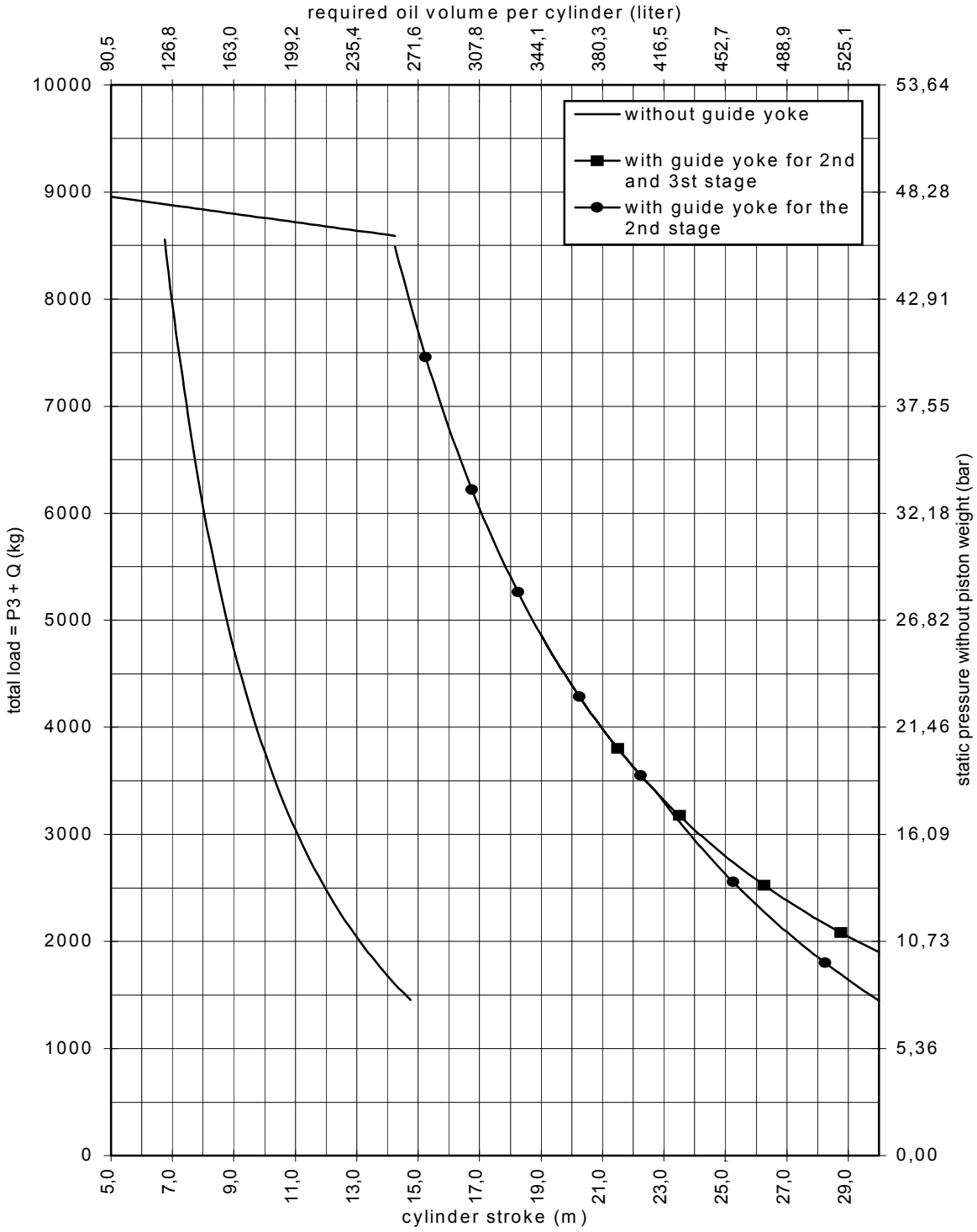
Selection diagram for Telescopic 3-stage Cylinder
Acc. to EN 81/2 - Central Direct System
Type 3PL 85/3 - VE



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 46 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 85 / 100 / 170 (mm)	Factor of excess pressure = 1,4
reference area	A = 132,161 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 134,587 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	38,875 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - Central Direct System	emesso	S. A.	20/11/1998
		controllato		20/11/1998
		nullaosta		
Sost. il 2PX0273 Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 3 a		pag 6 di 9

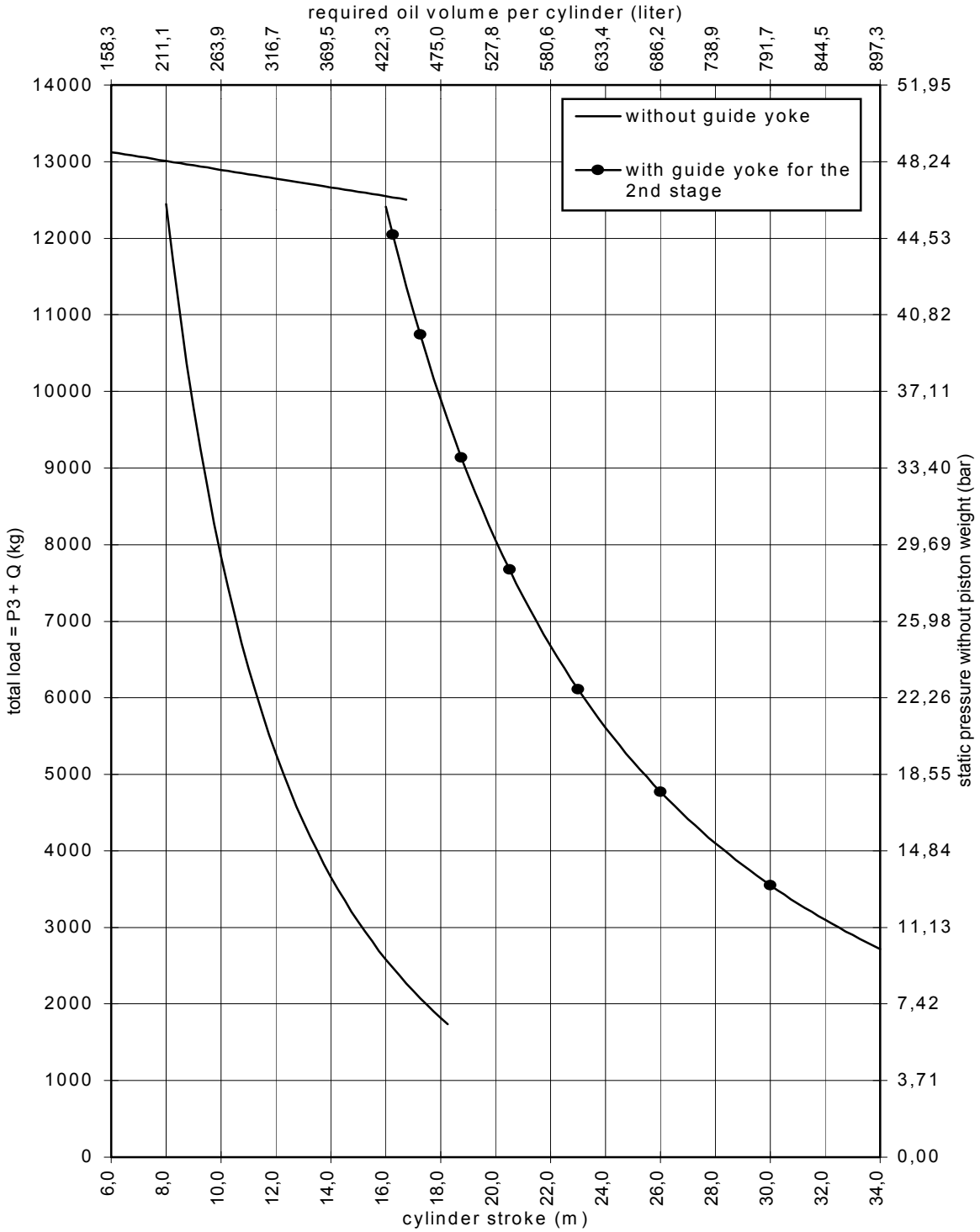
Selection diagram for Telescopic 3-stage Cylinder
Acc. to EN 81/2 - Central Direct System
Type 3PL 100/3 - VE



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 50 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 100 / 140 / 200 (mm)	Factor of excess pressure = 1,4
reference area	A = 182,891 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 184,472 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	39,491 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - Central Direct System	emesso	S. A.	20/11/1998
		controllato		20/11/1998
		nullaosta		
Sost. il 2PX0273 Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 3 a		pag 7 di 9

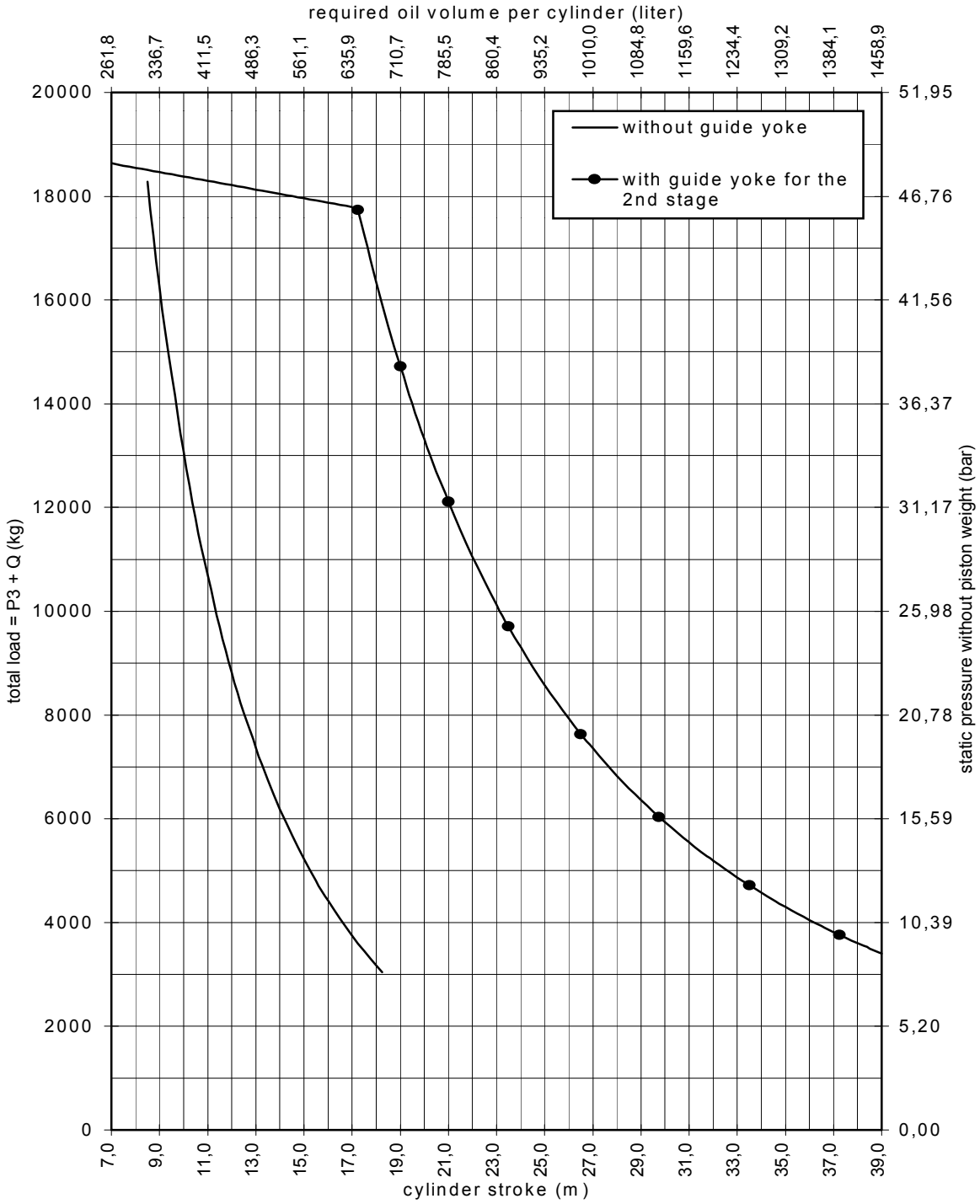
Selection diagram for Telescopic 3-stage Cylinder
Acc. to EN 81/2 - Central Direct System
Type 3PL 120/3 - VE



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 51 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 120 / 170 / 240 (mm)	Factor of excess pressure = 1,4
reference area	A = 264,365 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 298,530 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	57,671 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - Central Direct System	emesso	S. A.	20/11/1998
		controllato		20/11/1998
		nullaosta		
Sost. il 2PX0273 Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 3 a		pag 8 di 9

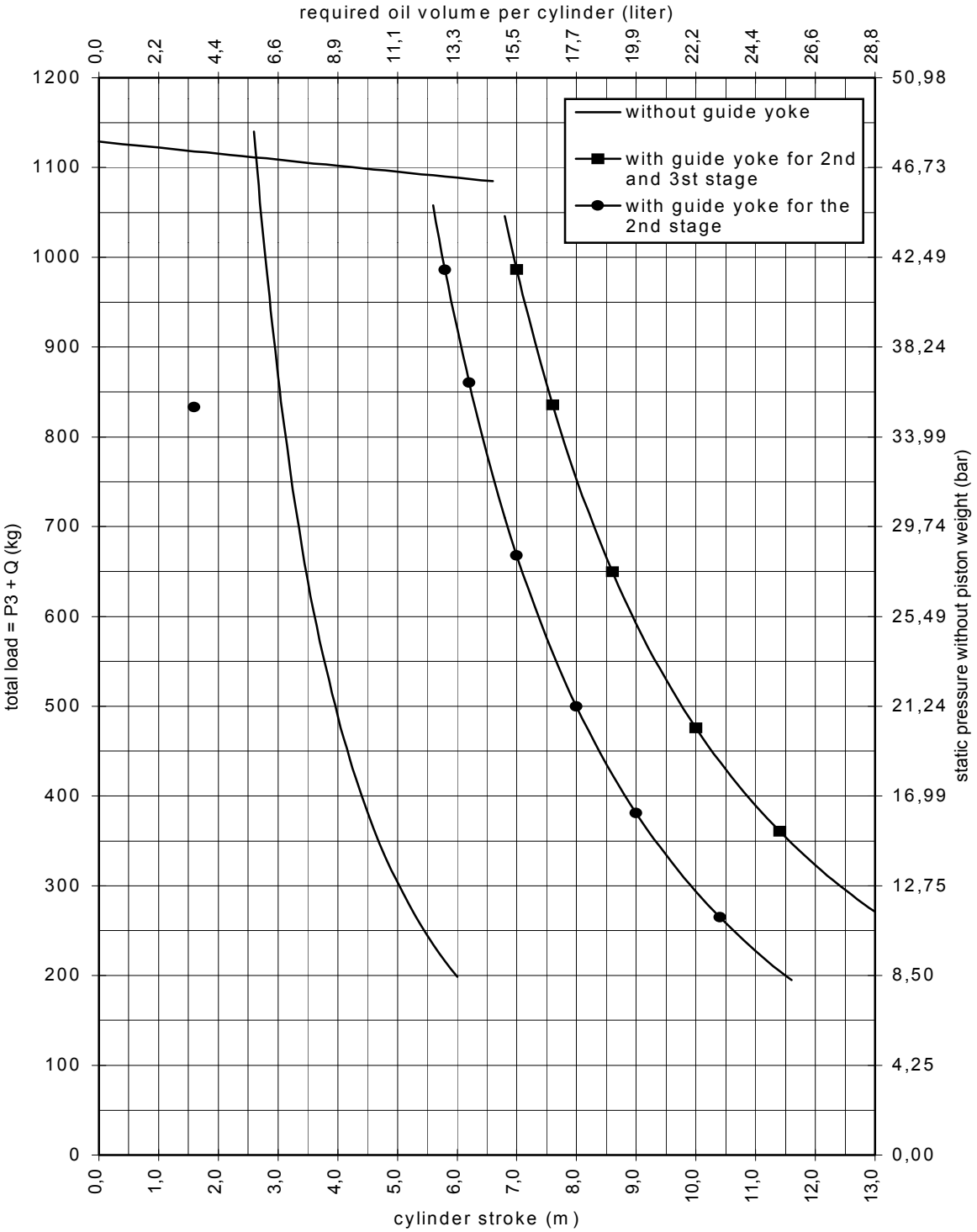
Selection diagram for Telescopic 3-stage Cylinder
Acc. to EN 81/2 - Central Direct System
Type 3PL 140/3 - VE



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 51 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 140 / 200 / 290 (mm)	Factor of excess pressure = 1,4
reference area	A = 377,655 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 441,973 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	83,981 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - Central Direct System	emesso	S. A.	20/11/1998
		controllato		20/11/1998
		nullaosta		
Sost. il 2PX0273 Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 3 a		pag 9 di 9

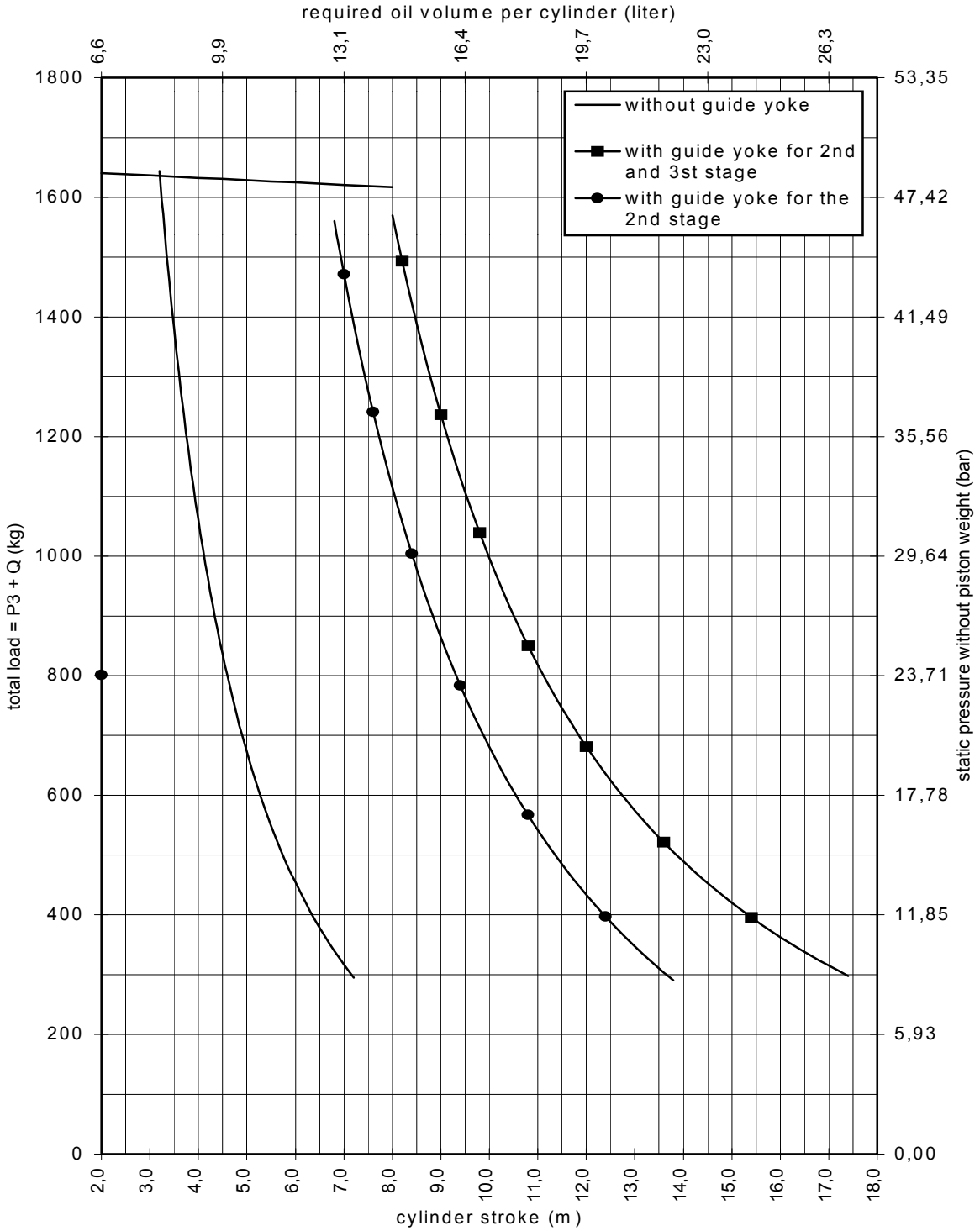
Selection diagram for Telescopic 3-stage Cylinder
Acc. to EN 81/2 - Side Ram System
Type 3PL 35/3 - RS



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 49 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 35 / 50 / 70 (mm)	Factor of excess pressure = 1,4
reference area	A = 23,090 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 24,465 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	6,702 (kg) (per meter stroke)	z = number of cylinders

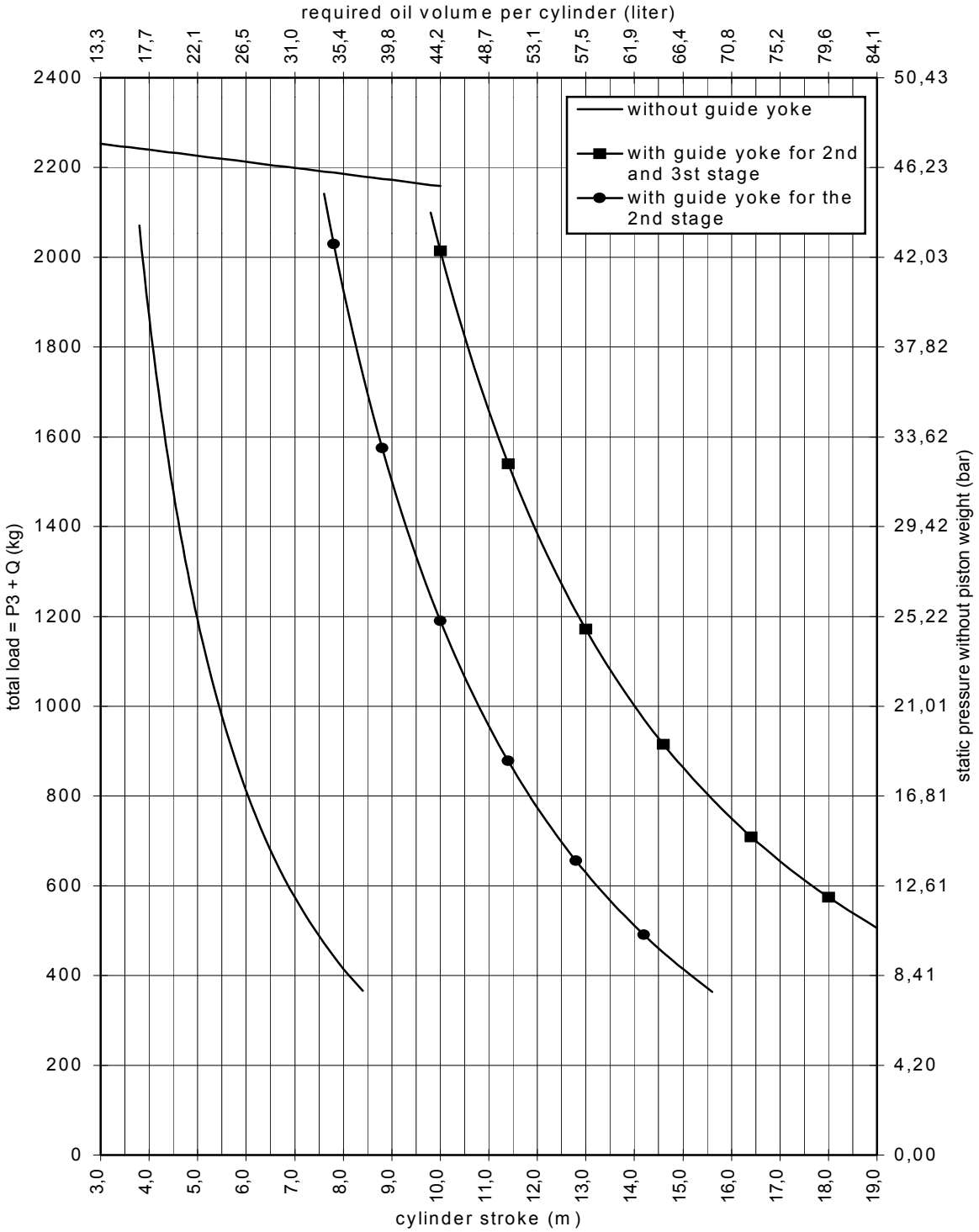
C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - Side Ram System	emesso	S. A.	20/11/1998
		controllato		20/11/1998
		nullaosta		
Sost. il 2PX0274 Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 4 a		pag 1 di 9

Selection diagram for Telescopic 3-stage Cylinder
Acc. to EN 81/2 - Side Ram System
Type 3PL 42/3 - RS



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 50 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 42 / 60 / 85 (mm)	Factor of excess pressure = 1,4
reference area	A = 33,100 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 27,014 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	9,782 (kg) (per meter stroke)	z = number of cylinders

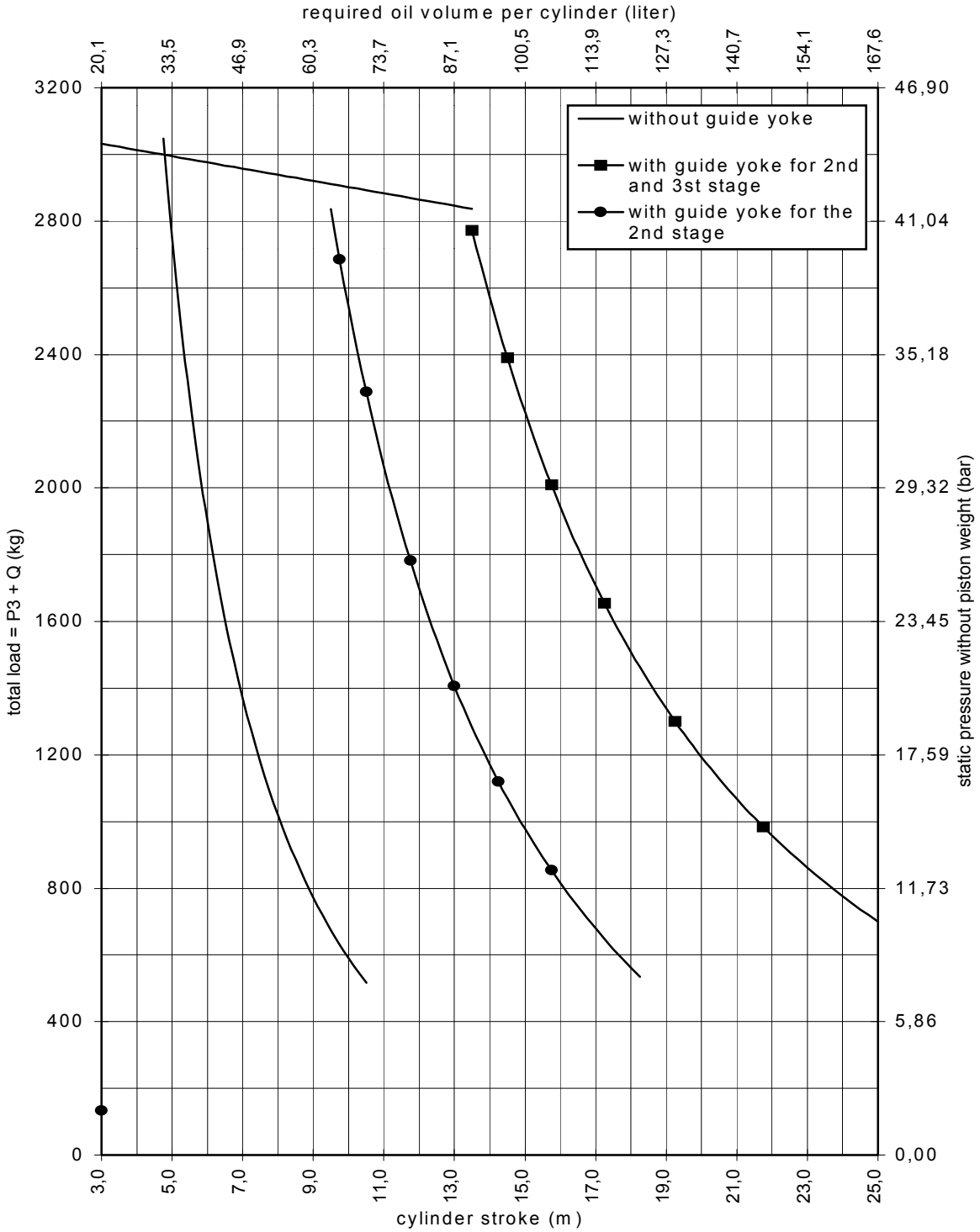
Selection diagram for Telescopic 3-stage Cylinder
Acc. to EN 81/2 - Side Ram System
Type 3PL 50/3 - RS



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 49 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 50 / 70 / 100 (mm)	Factor of excess pressure = 1,4
reference area	A = 46,684 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 38,022 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	13,512 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - Side Ram System	emesso	S. A.	20/11/1998
		controllato		20/11/1998
		nullaosta		
Sost. il 2PX0274 Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 4 a		pag 3 di 9

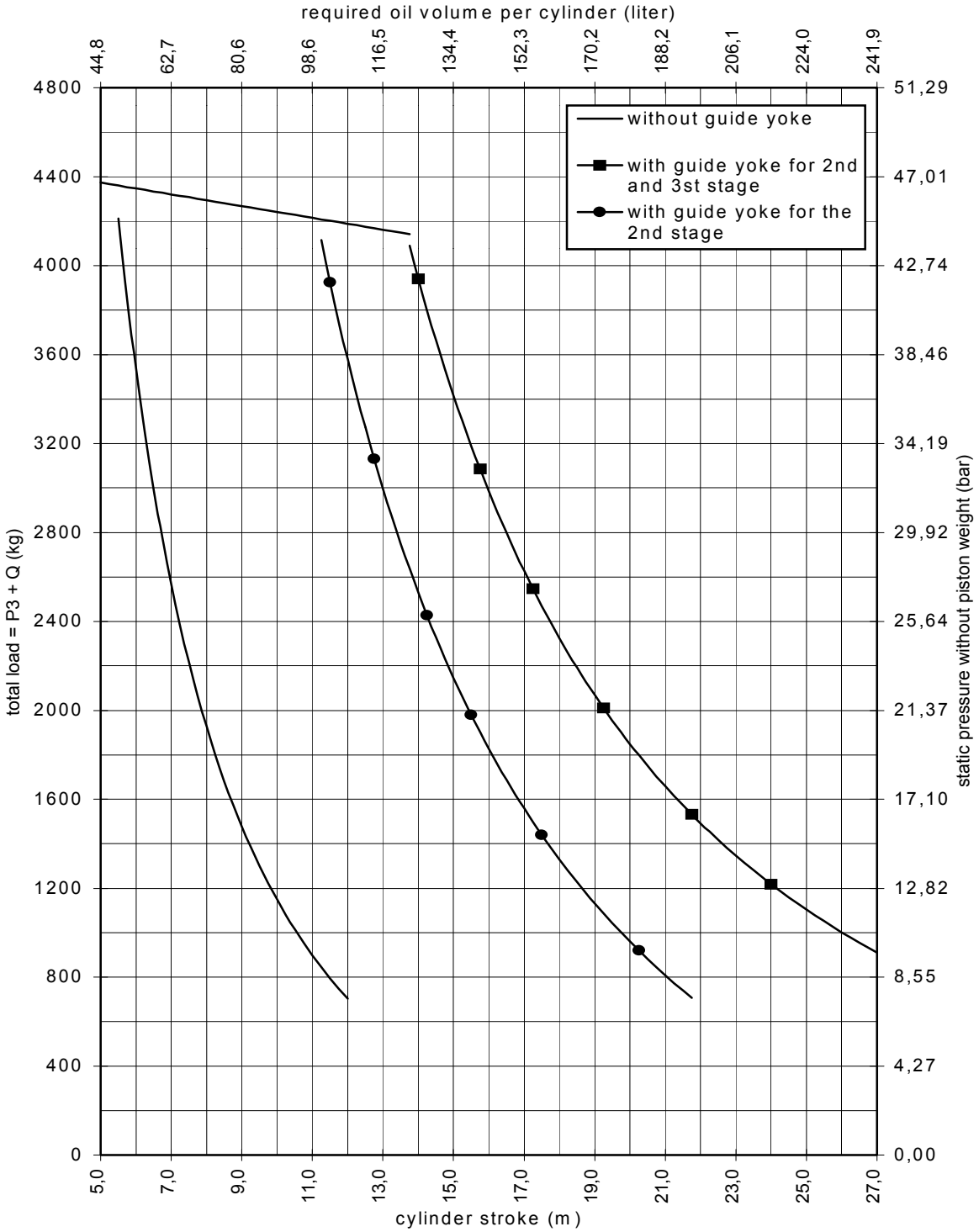
Selection diagram for Telescopic 3-stage Cylinder
Acc. to EN 81/2 - Side Ram System
Type 3PL 63/3 - RS



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 46 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 63 / 85 / 120 (mm)	Factor of excess pressure = 1,4
reference area	A = 66,928 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 50,866 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	18,556 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - Side Ram System	emesso	S. A.	20/11/1998
		controllato		20/11/1998
		nullaosta		
Sost. il 2PX0274 Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 4 a		pag 4 di 9

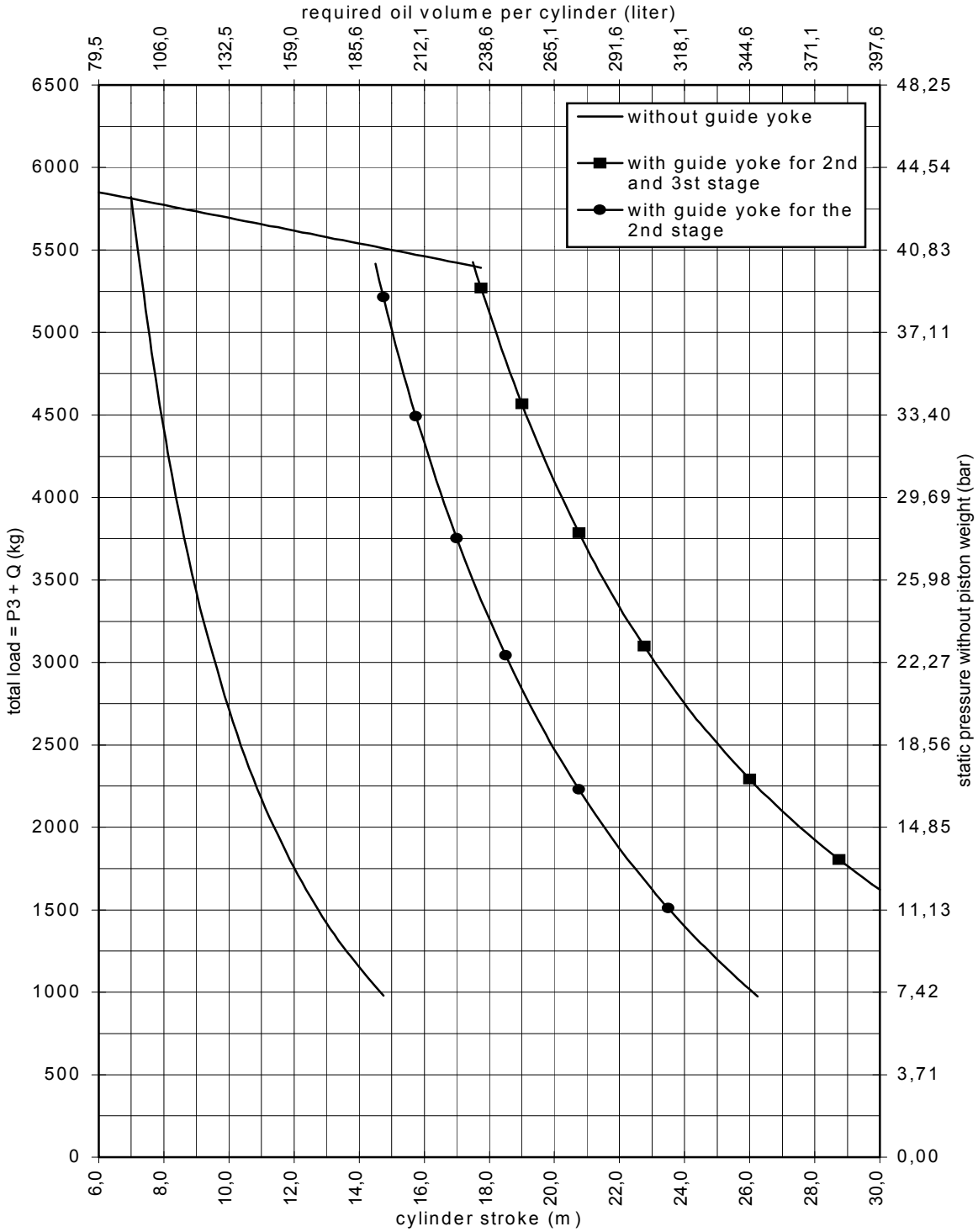
Selection diagram for Telescopic 3-stage Cylinder
Acc. to EN 81/2 - Side Ram System
Type 3PL 70/3 - RS



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 49 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 70 / 100 / 140 (mm)	Factor of excess pressure = 1,4
reference area	A = 91,816 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 80,530 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	26,460 (kg) (per meter stroke)	z = number of cylinders

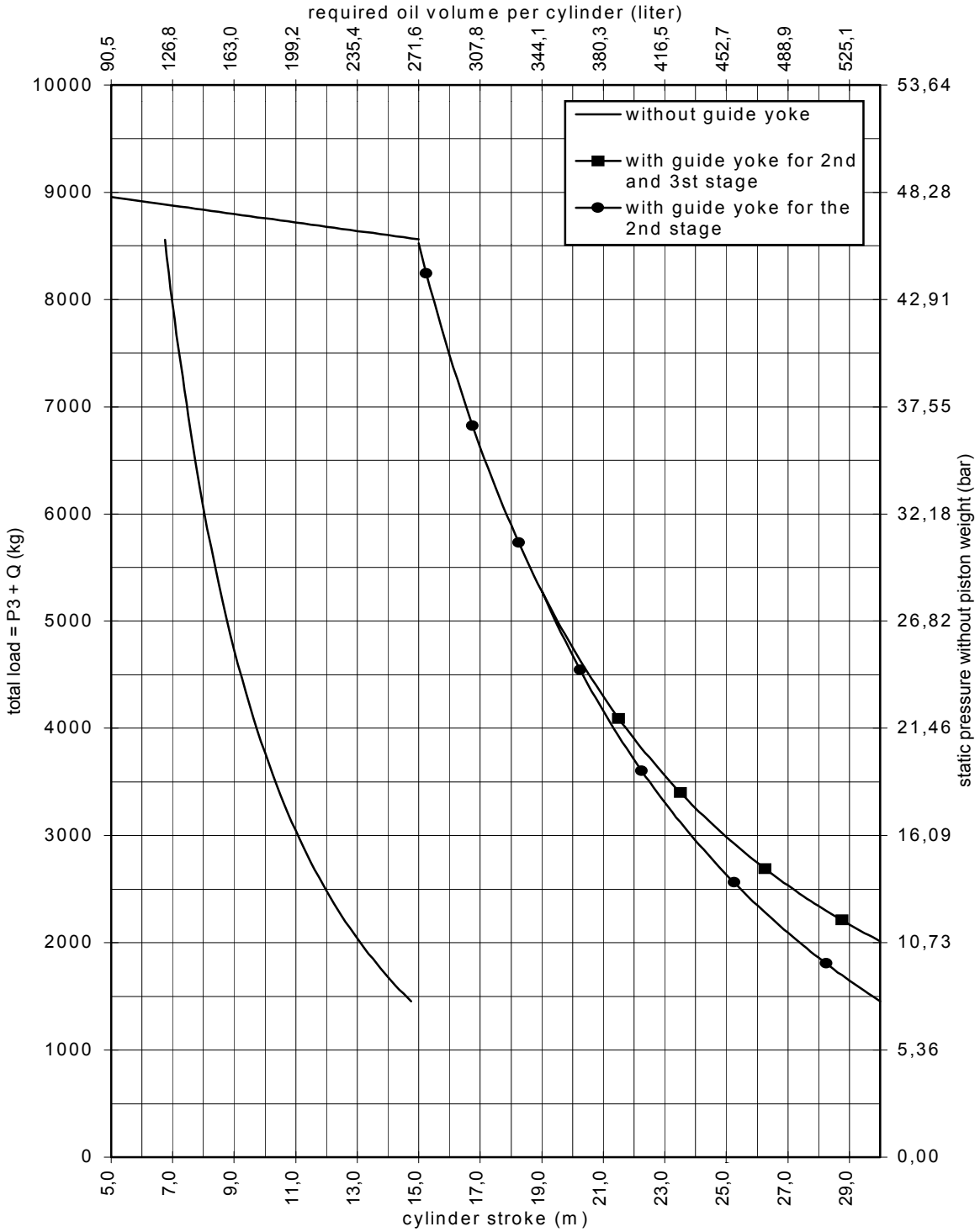
C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - Side Ram System	emesso	S. A.	20/11/1998	
		controllato		20/11/1998	
		nullaosta			
Sost. il 2PX0274 Sost. da	DOCUMENTAZIONI TECNICHE	2PX0274a		pag 5 di 9	

Selection diagram for Telescopic 3-stage Cylinder
Acc. to EN 81/2 - Side Ram System
Type 3PL 85/3 - RS



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 46 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 85 / 100 / 170 (mm)	Factor of excess pressure = 1,4
reference area	A = 132,161 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 113,149 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	38,875 (kg) (per meter stroke)	z = number of cylinders

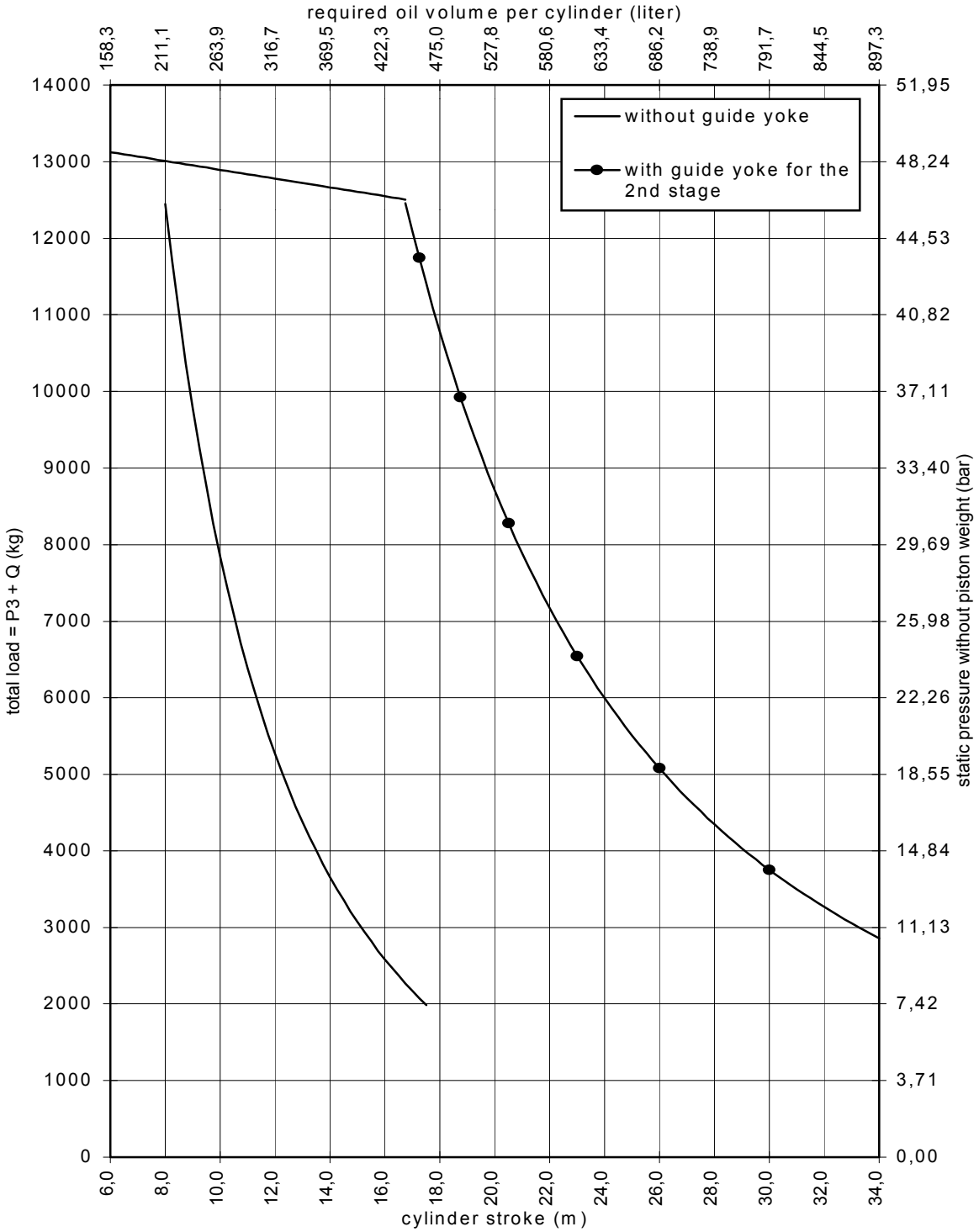
Selection diagram for Telescopic 3-stage Cylinder
Acc. to EN 81/2 - Side Ram System
Type 3PL 100/3 - RS



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 50 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 100 / 140 / 200 (mm)	Factor of excess pressure = 1,4
reference area	A = 182,891 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 168,195 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	39,491 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - Side Ram System	emesso	S. A.	20/11/1998	
		controllato		20/11/1998	
		nullaosta			
Sost. il 2PX0274 Sost. da	DOCUMENTAZIONI TECNICHE	2PX0274a		pag 7 di 9	

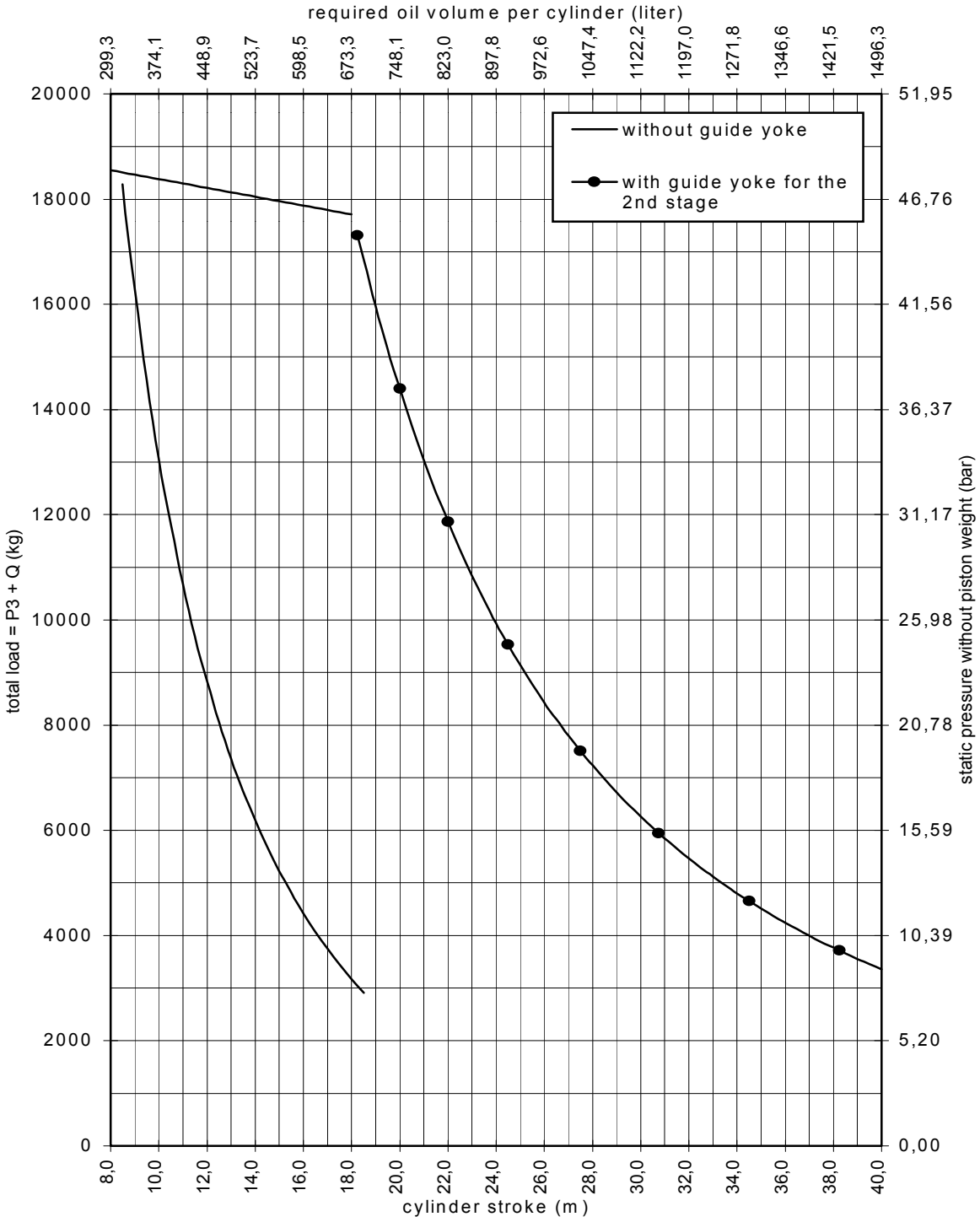
Selection diagram for Telescopic 3-stage Cylinder
Acc. to EN 81/2 - Side Ram System
Type 3PL 120/3 - RS



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 51 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 120 / 170 / 240 (mm)	Factor of excess pressure = 1,4
reference area	A = 264,365 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 273,191 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	57,671 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - Side Ram System	emesso	S. A.	20/11/1998	
		controllato		20/11/1998	
		nullaosta			
Sost. il 2PX0274 Sost. da	DOCUMENTAZIONI TECNICHE	2PX0274a		pag 8 di 9	

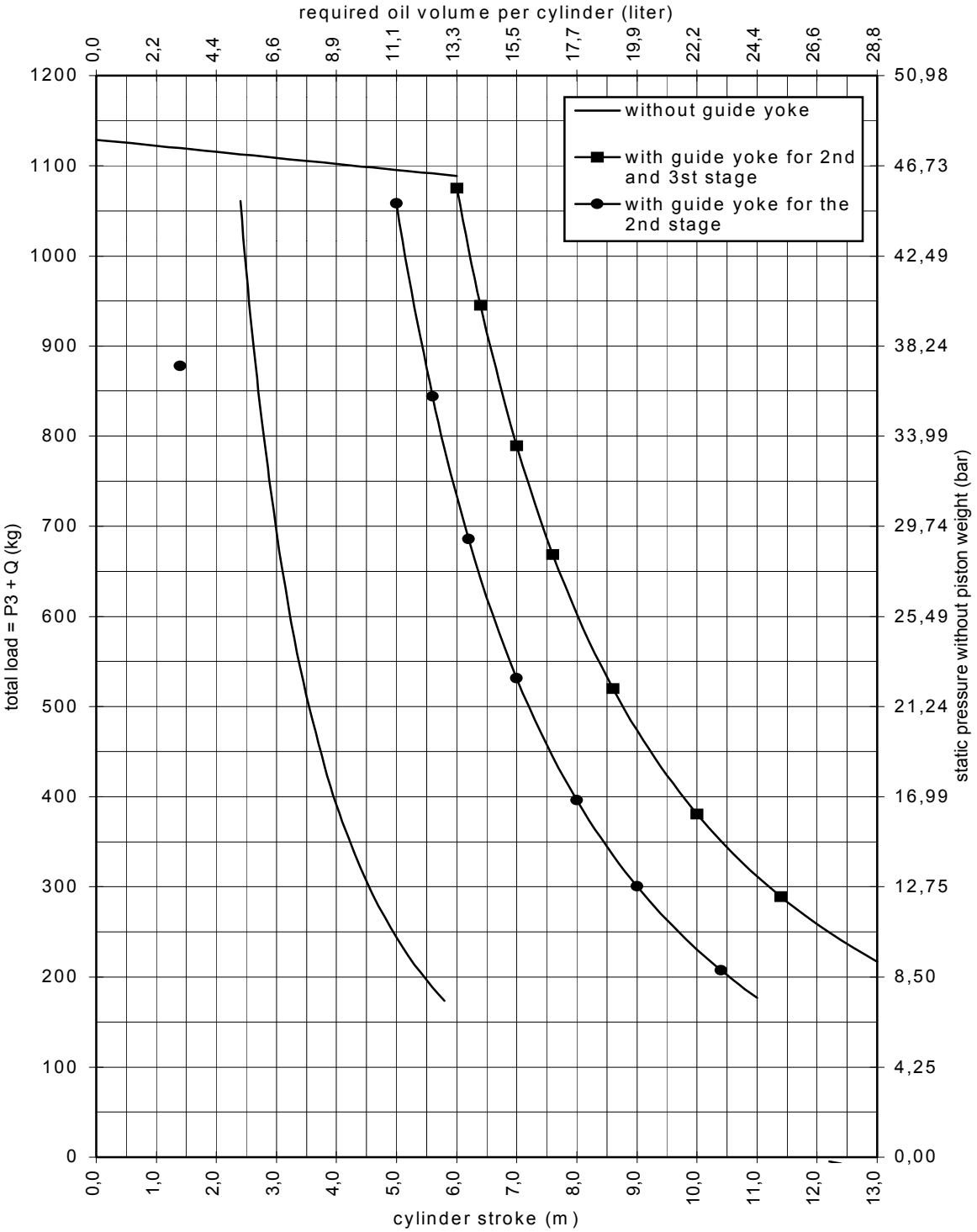
Selection diagram for Telescopic 3-stage Cylinder
Acc. to EN 81/2 - Side Ram System
Type 3PL 140/3 - RS



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 51 (bar)	Factor of safety to buckling = 2,0
piston rod diameter	d_a = 140 / 200 / 290 (mm)	Factor of excess pressure = 1,4
reference area	A = 377,655 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 411,824 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	83,981 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - Side Ram System	emesso	S. A.	20/11/1998
		controllato		20/11/1998
		nullaosta		
Sost. il 2PX0274	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 4 a		pag 9
Sost. da				di 9

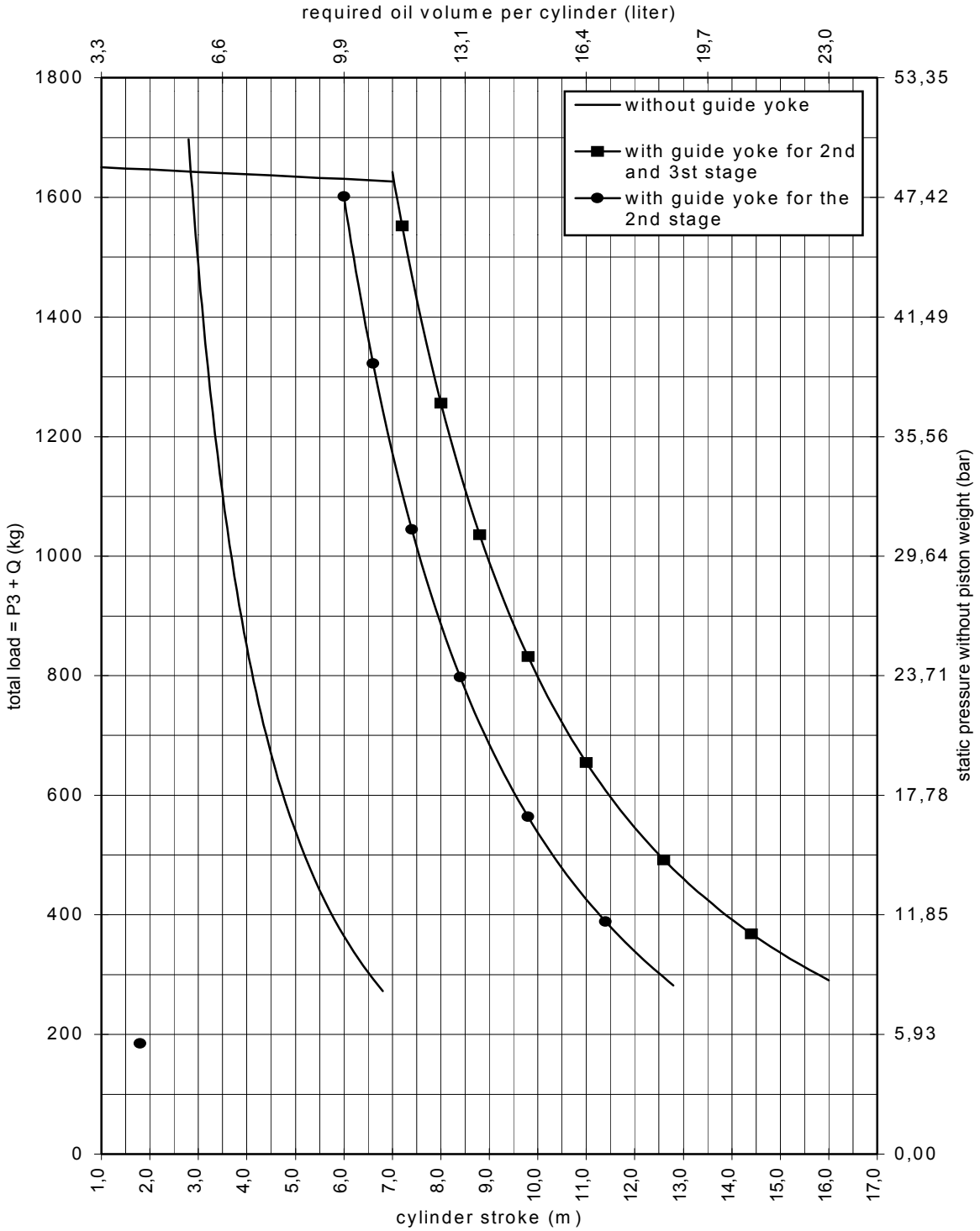
Selection diagram for Telescopic 3-stage Cylinder
Acc. to TRA 200 - Central Direct and Side Ram System
Type 3PL 35/3 - VT



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 49 (bar)	Factor of safety to buckling = 2,5
piston rod diameter	d_a = 35 / 50 / 70 (mm)	Factor of excess pressure = 1,4
reference area	A = 23,090 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 24,465 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	6,702 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - VT Series	emesso	S. A.	20/11/1998
		controllato		20/11/1998
		nullaosta		
Sost. il 2 PX 0275	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 5 a		pag 1 di 9
Sost. da				

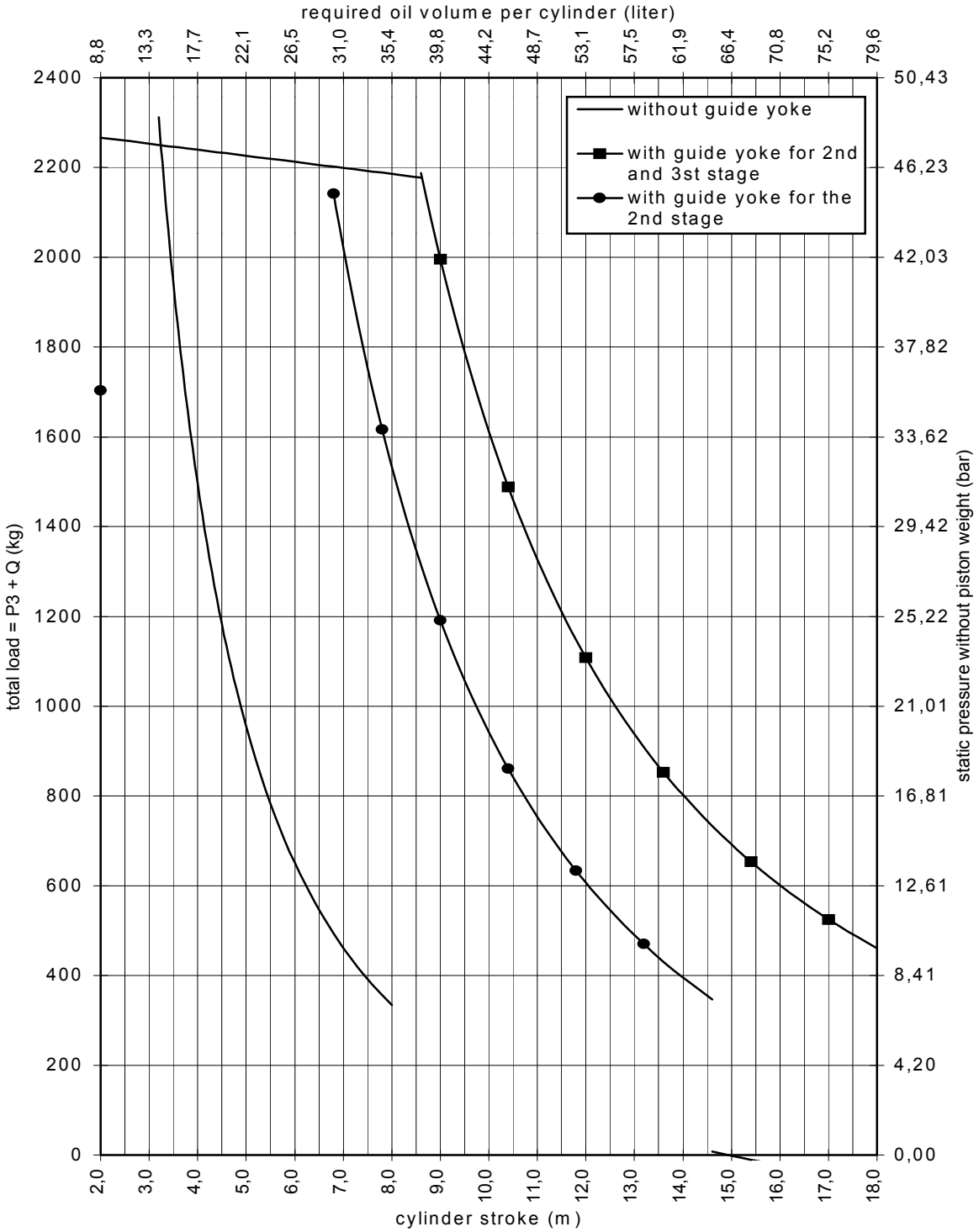
Selection diagram for Telescopic 3-stage Cylinder
Acc. to TRA 200 - Central Direct and Side Ram System
Type 3PL 42/3 - VT



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 50 (bar)	Factor of safety to buckling = 2,5
piston rod diameter	d_a = 42 / 60 / 85 (mm)	Factor of excess pressure = 1,4
reference area	A = 33,100 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 27,014 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	9,782 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - VT Series	emesso	S. A.	20/11/1998
		controllato		20/11/1998
		nullaosta		
Sost. il 2 PX 0275 / Sost. da	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 5 a	pag	2
			di	9

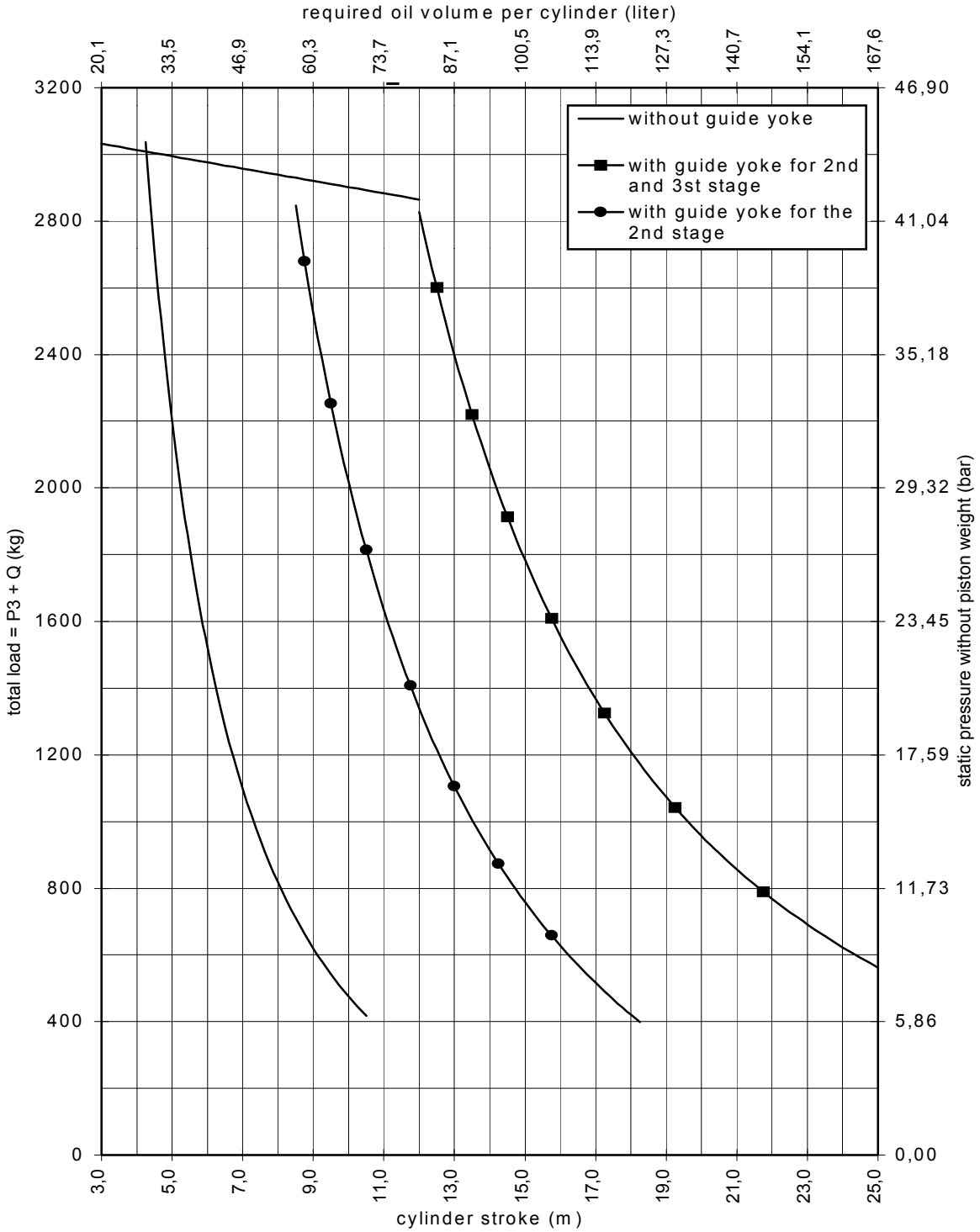
Selection diagram for Telescopic 3-stage Cylinder
Acc. to TRA 200 - Central Direct and Side Ram System
Type 3PL 50/3 - VT



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 49 (bar)	Factor of safety to buckling = 2,5
piston rod diameter	d_a = 50 / 70 / 100 (mm)	Factor of excess pressure = 1,4
reference area	A = 46,684 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 38,022 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	13,512 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - VT Series	emesso	S. A.	20/11/1998
		controllato		20/11/1998
		nullaosta		
Sost. il 2 PX 0275	DOCUMENTAZIONI TECNICHE	2 P X 0 2 7 5 a		pag 3 di 9
Sost. da				

Selection diagram for Telescopic 3-stage Cylinder
Acc. to TRA 200 - Central Direct and Side Ram System
Type 3PL 63/3 - VT



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 46 (bar)	Factor of safety to buckling = 2,5
piston rod diameter	d_a = 63 / 85 / 120 (mm)	Factor of excess pressure = 1,4
reference area	A = 66,928 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 50,866 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	18,556 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - VT Series	emesso	S. A.	20/11/1998	
		controllato		20/11/1998	
		nullaosta			
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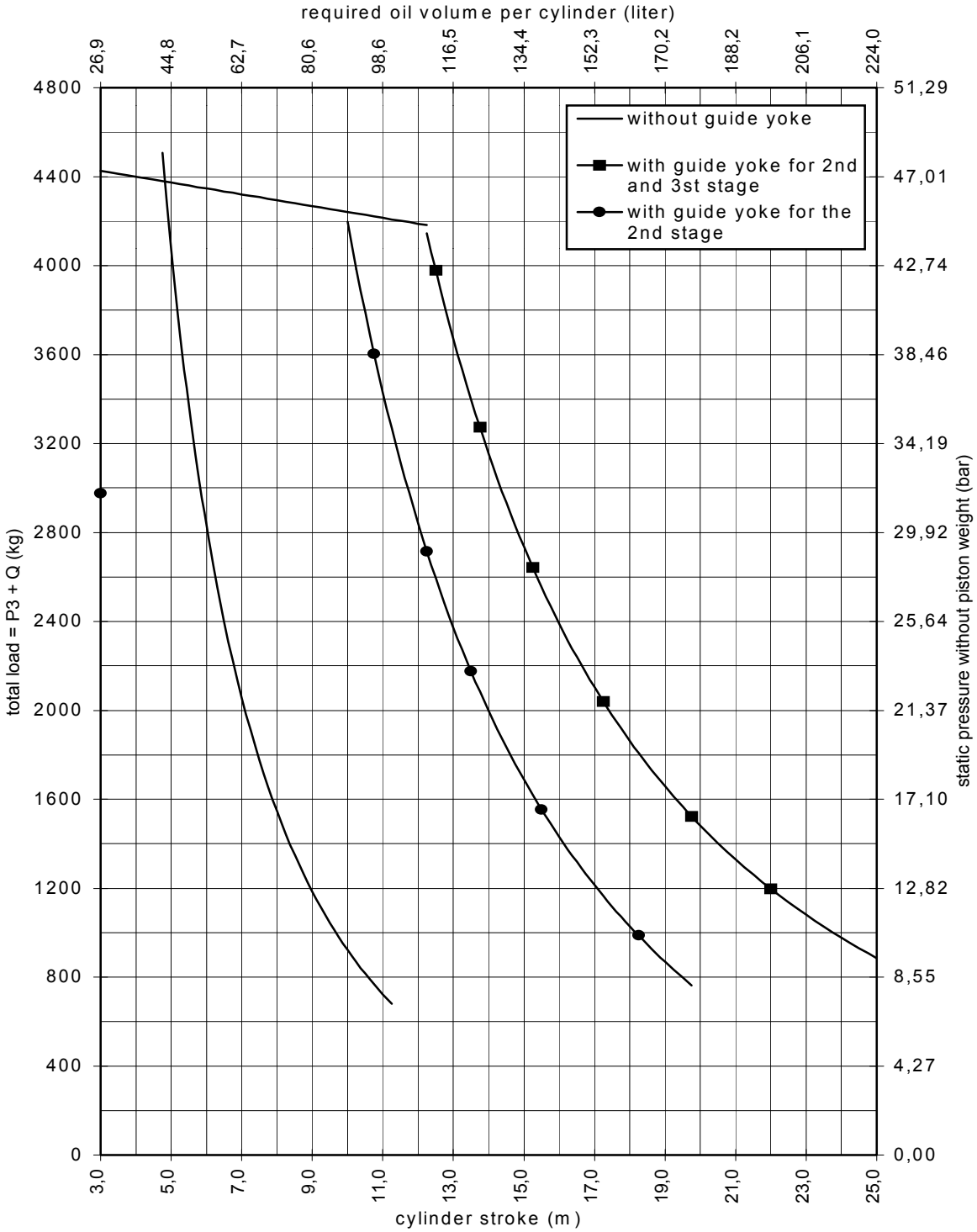
Selection diagram for Telescopic 3-stage Cylinder
Acc. to TRA 200 - Central Direct and Side Ram System
Type 3PL 70/3 - VT



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 49 (bar)	Factor of safety to buckling = 2,5
piston rod diameter	d_a = 70 / 100 / 140 (mm)	Factor of excess pressure = 1,4
reference area	A = 91,816 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 80,530 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	26,460 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - VT Series	emesso	S. A.	20/11/1998
		controllato		20/11/1998
		nullaosta		
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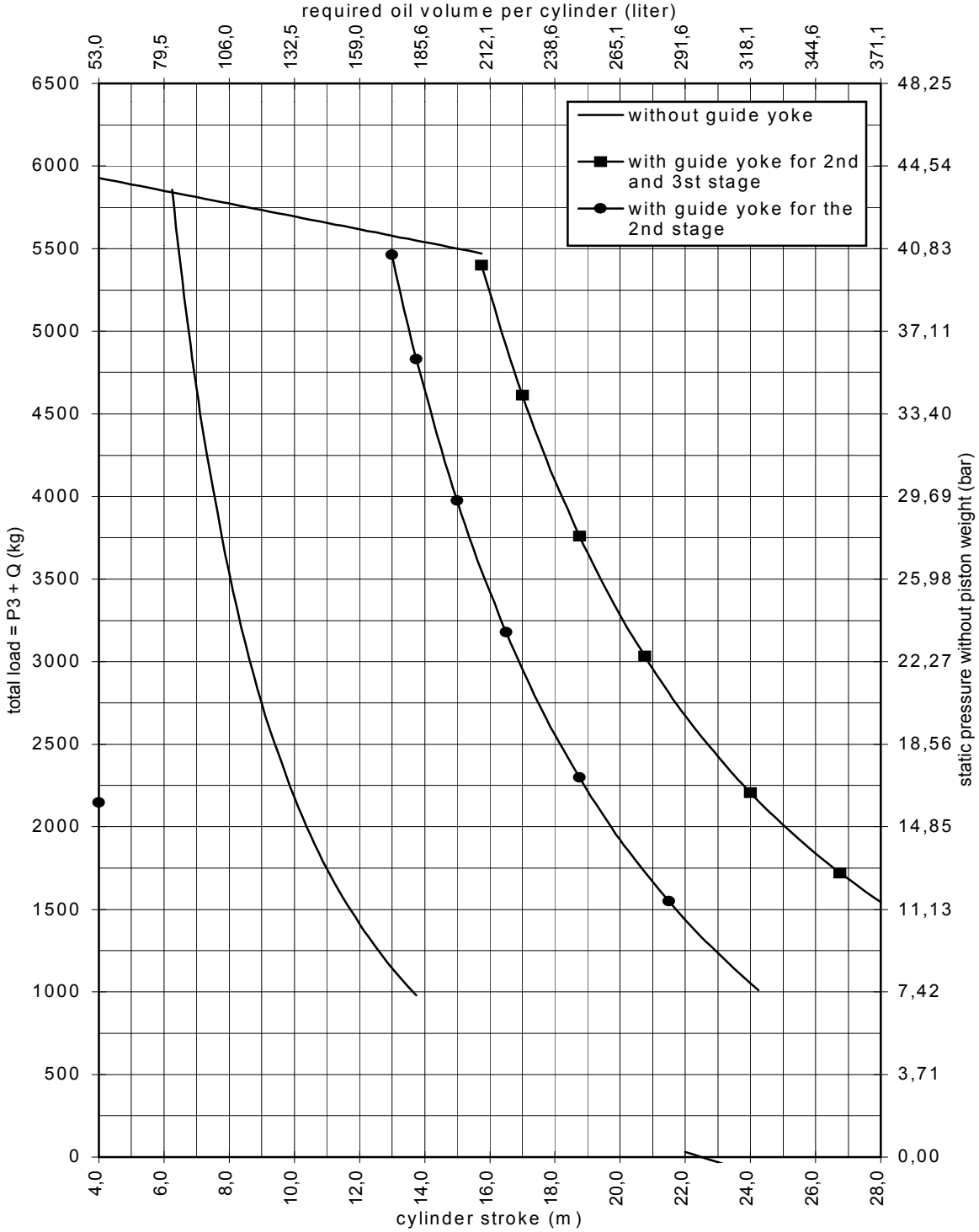
Selection diagram for Telescopic 3-stage Cylinder
Acc. to TRA 200 - Central Direct and Side Ram System
Type 3PL 85/3 - VT



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 46 (bar)	Factor of safety to buckling = 2,5
piston rod diameter	d_a = 85 / 100 / 170 (mm)	Factor of excess pressure = 1,4
reference area	A = 132,161 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 113,149 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	38,875 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - VT Series	emesso	S. A.	20/11/1998
		controllato		20/11/1998
		nullaosta		
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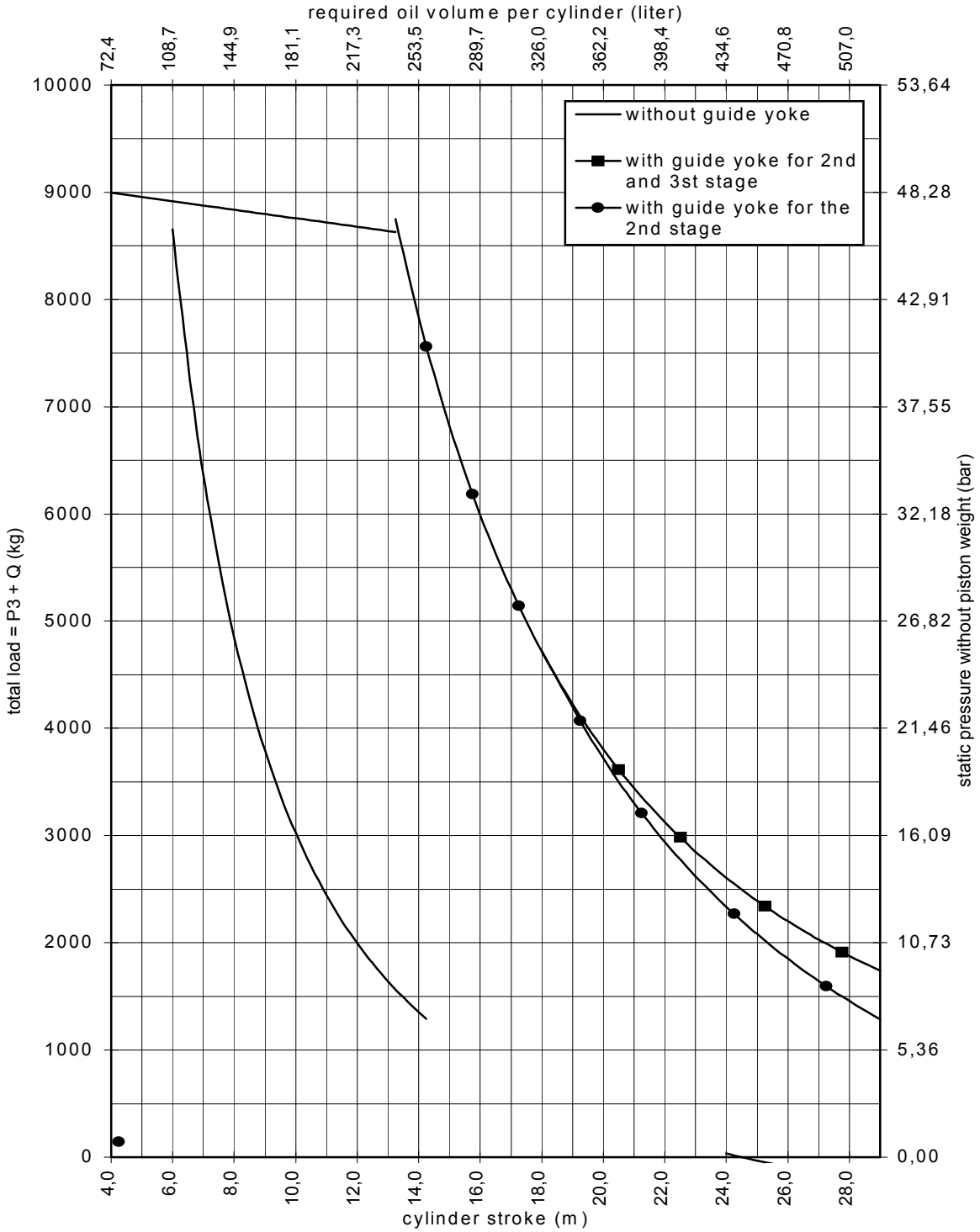
Selection diagram for Telescopic 3-stage Cylinder
Acc. to TRA 200 - Central Direct and Side Ram System
Type 3PL 100/3 - VT



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 50 (bar)	Factor of safety to buckling = 2,5
piston rod diameter	d_a = 100 / 140 / 200 (mm)	Factor of excess pressure = 1,4
reference area	A = 182,891 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 168,195 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	39,491 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - VT Series	emesso	S. A.	20/11/1998
		controllato		20/11/1998
		nullaosta		
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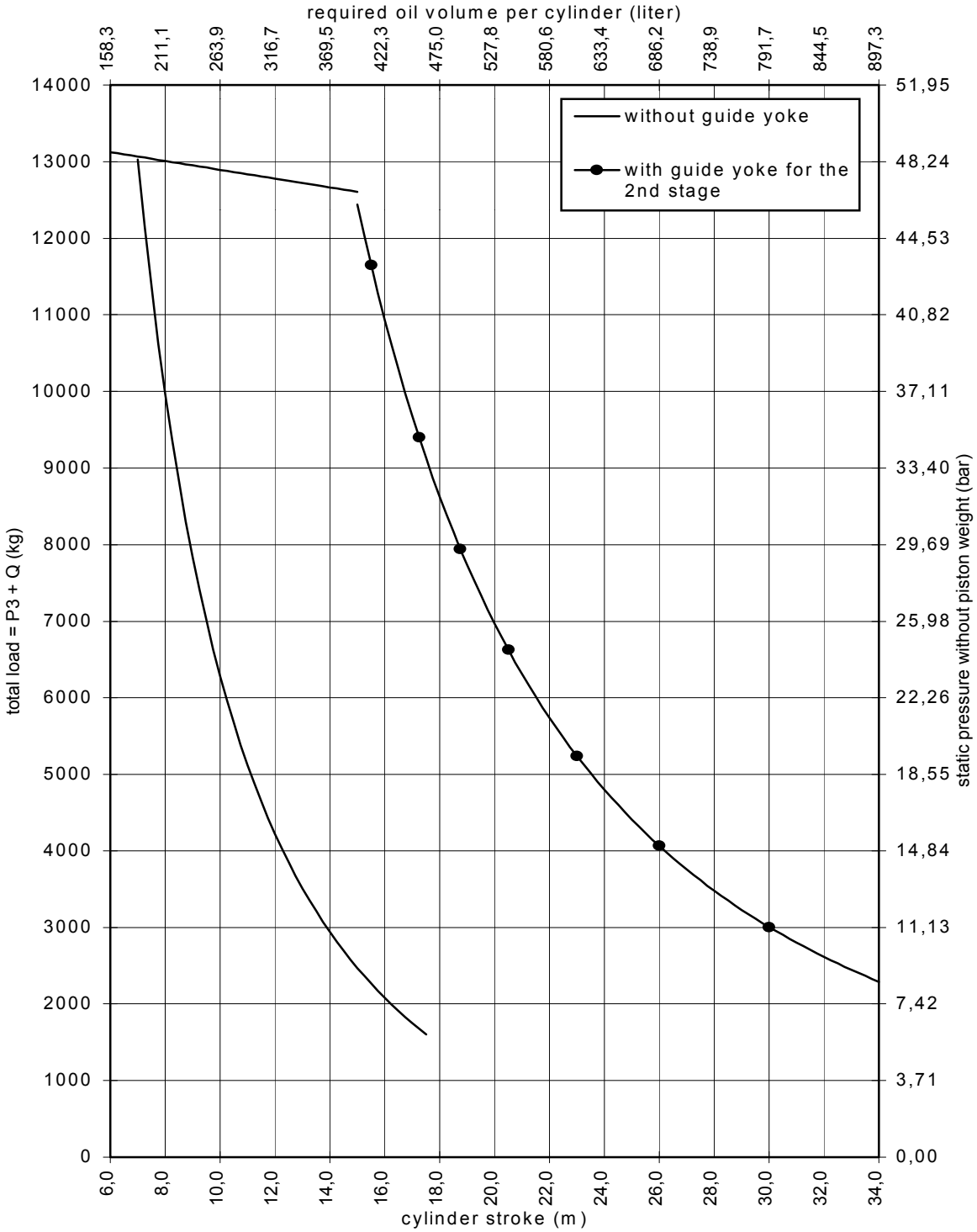
Selection diagram for Telescopic 3-stage Cylinder
Acc. to TRA 200 - Central Direct and Side Ram System
Type 3PL 120/3 - VT



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 51 (bar)	Factor of safety to buckling = 2,5
piston rod diameter	d_a = 120 / 170 / 240 (mm)	Factor of excess pressure = 1,4
reference area	A = 264,365 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 273,191 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	57,671 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - VT Series	emesso	S. A.	20/11/1998
		controllato		20/11/1998
		nullaosta		
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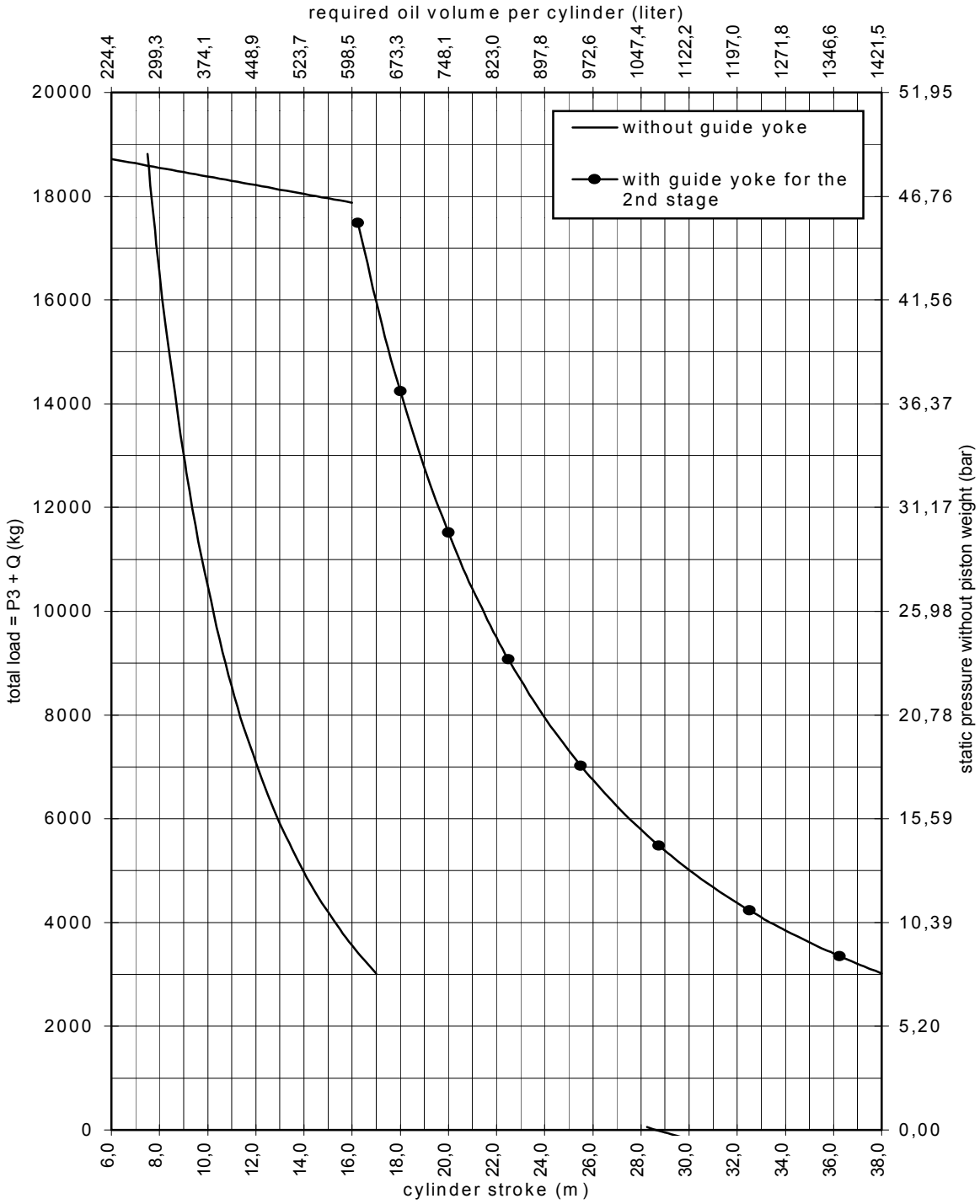
Selection diagram for Telescopic 3-stage Cylinder
Acc. to TRA 200 - Central Direct and Side Ram System
Type 3PL 140/3 - VT



Technical data :	$p_{stat} = 0{,}981 * \frac{P_3 + Q + m_p}{A + z}$ (bar)	
max static pressure	p = 51 (bar)	Factor of safety to buckling = 2,5
piston rod diameter	d_a = 140 / 200 / 290 (mm)	Factor of excess pressure = 1,4
reference area	A = 377,655 (cm^2)	Q = pay load (kg)
weight of piston	m_p = 411,824 (kg) (0 stroke) +	P_3 = weight of cabina (kg)
	83,981 (kg) (per meter stroke)	z = number of cylinders

C.O.A.M. S.p.A. COMPONENTI OLEODINAMICI PER ASCENSORI E MONTACARICHI	Selection diagram for telescopic 3-stage cylinder - VT Series	emesso	S. A.	20/11/1998
		controllato		20/11/1998
		nullaosta		
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